FIG. 1

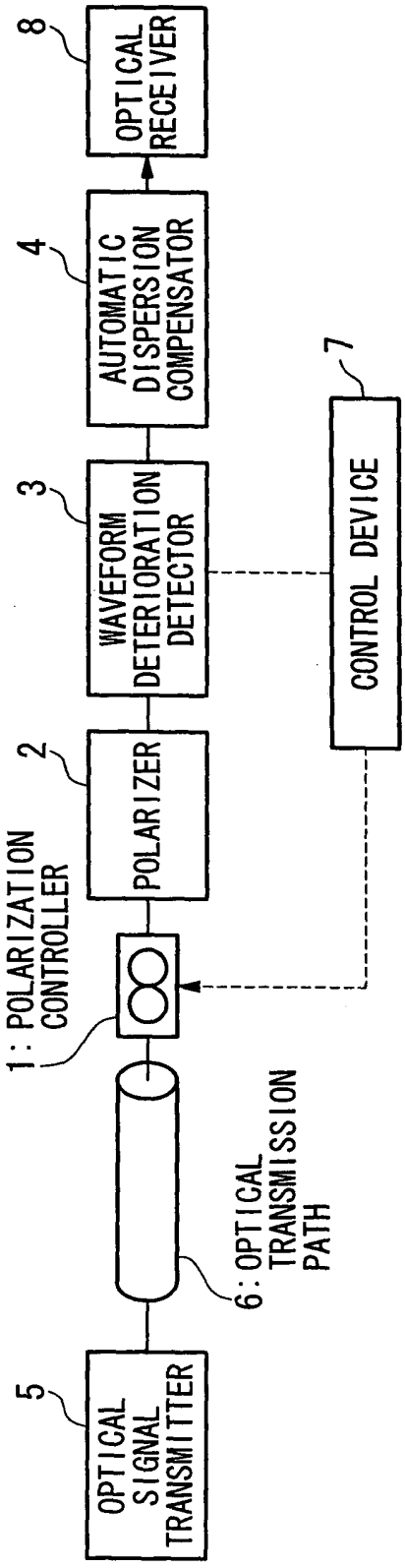

8
OPTICAL RECEIVER
4
AUTOMATIC DISPERSION COMPENSATOR
3
WAVEFORM DETERIORATION DETECTOR
7
CONTROL DEVICE
2
POLARIZER
1: POLARIZATION CONTROLLER
6: OPTICAL TRANSMISSION PATH
5
OPTICAL SIGNAL TRANSMITTER

FIG. 2

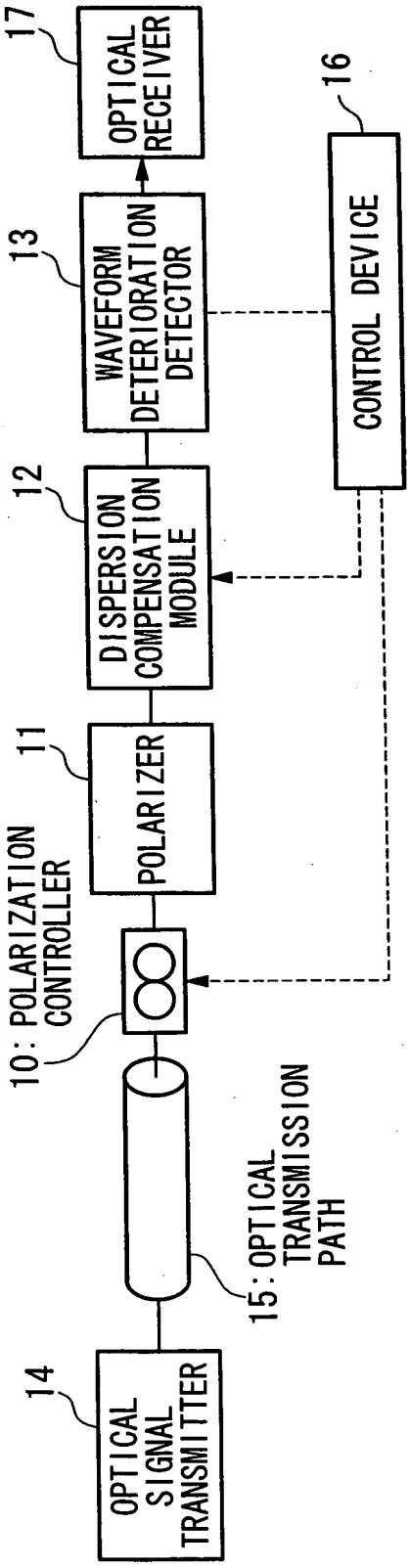

OPTICAL SIGNAL TRANSMITTER
14
15: OPTICAL TRANSMISSION PATH
10: POLARIZATION CONTROLLER
POLARIZER
11
DISPERSION COMPENSATION MODULE
12
WAVEFORM DETERIORATION DETECTOR
13
OPTICAL RECEIVER
17
CONTROL DEVICE
16

FIG. 3

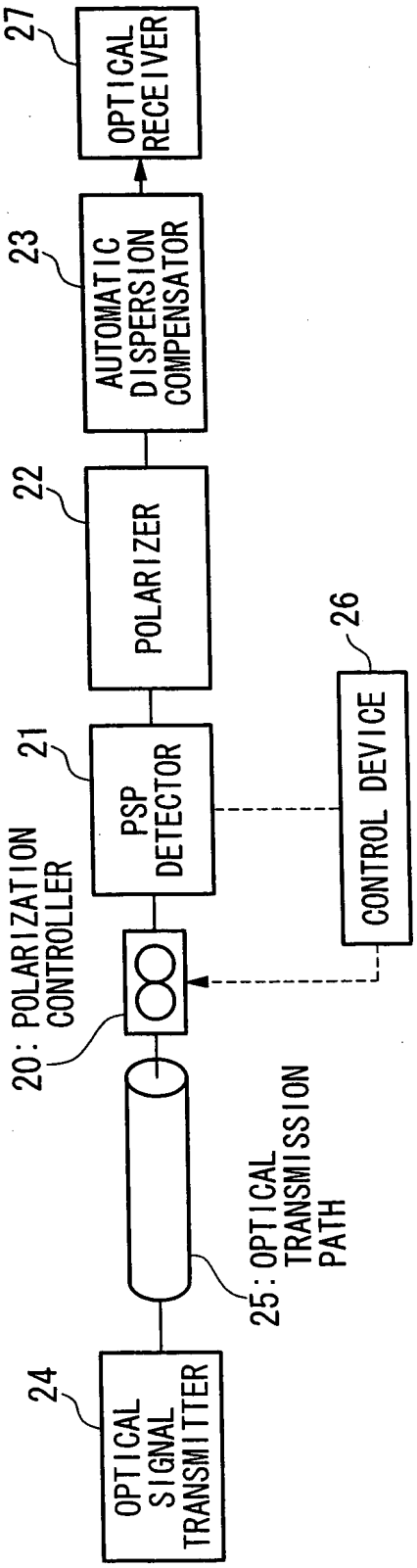

OPTICAL SIGNAL TRANSMITTER
24
25: OPTICAL TRANSMISSION PATH
20: POLARIZATION CONTROLLER
PSP DETECTOR
21
POLARIZER
22
AUTOMATIC DISPERSION COMPENSATOR
23
OPTICAL RECEIVER
27
CONTROL DEVICE
26

FIG. 4

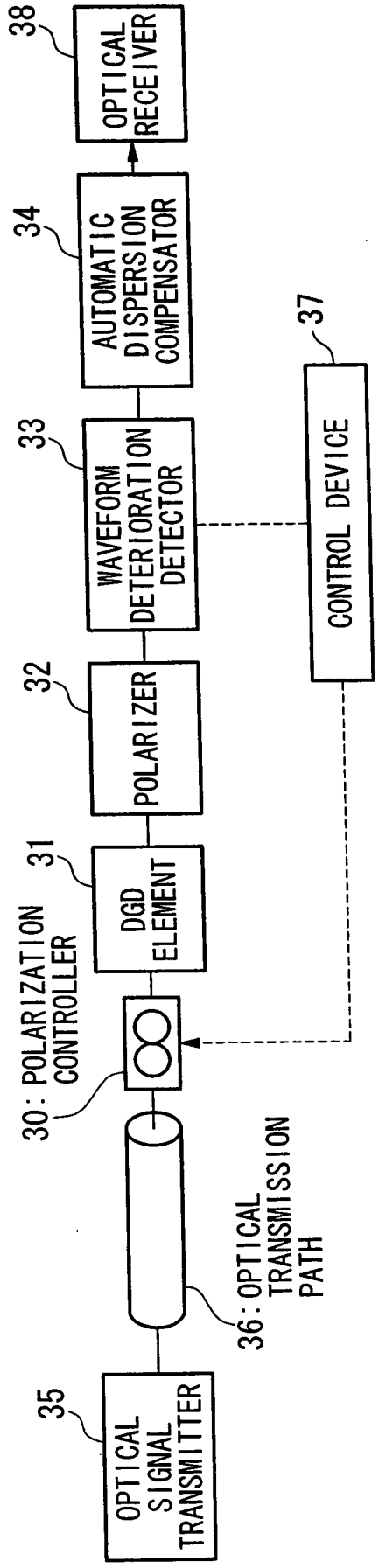

OPTICAL SIGNAL TRANSMITTER
35
36: OPTICAL TRANSMISSION PATH
30: POLARIZATION CONTROLLER
DGD ELEMENT
31
POLARIZER
32
WAVEFORM DETERIORATION DETECTOR
33
AUTOMATIC DISPERSION COMPENSATOR
34
OPTICAL RECEIVER
38
CONTROL DEVICE
37

FIG. 5

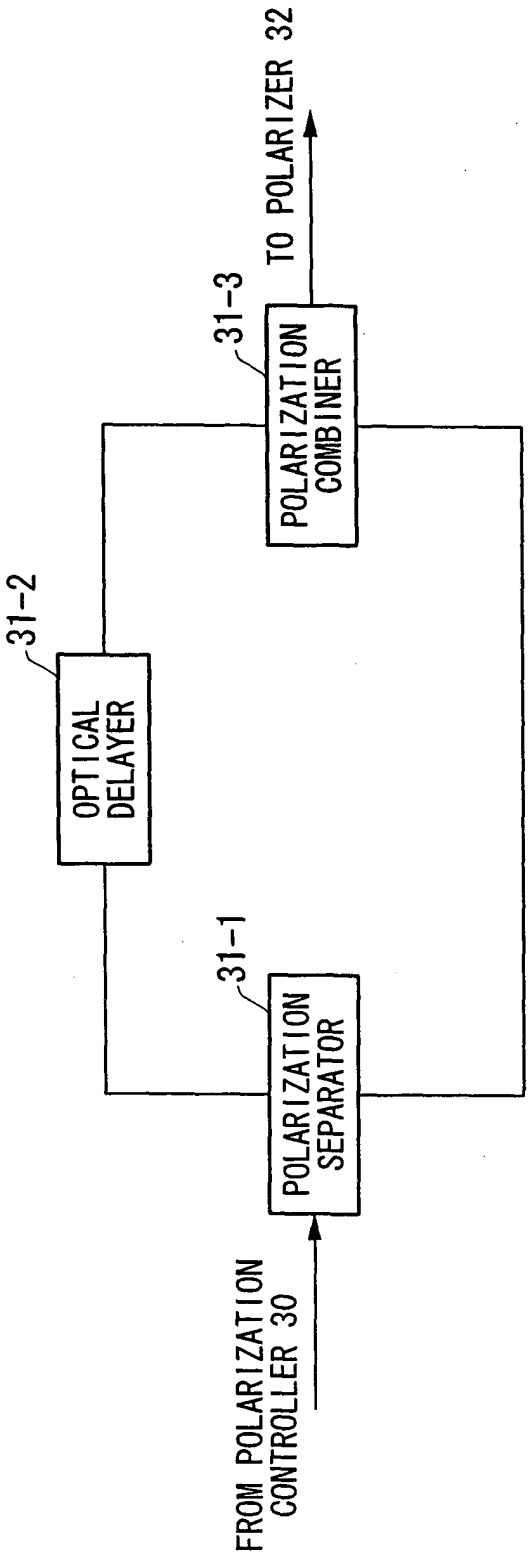

FROM POLARIZATION CONTROLLER 30
POLARIZATION SEPARATOR
31-1
OPTICAL DELAYER
31-2
POLARIZATION COMBINER
31-3
TO POLARIZER 32

FIG. 6

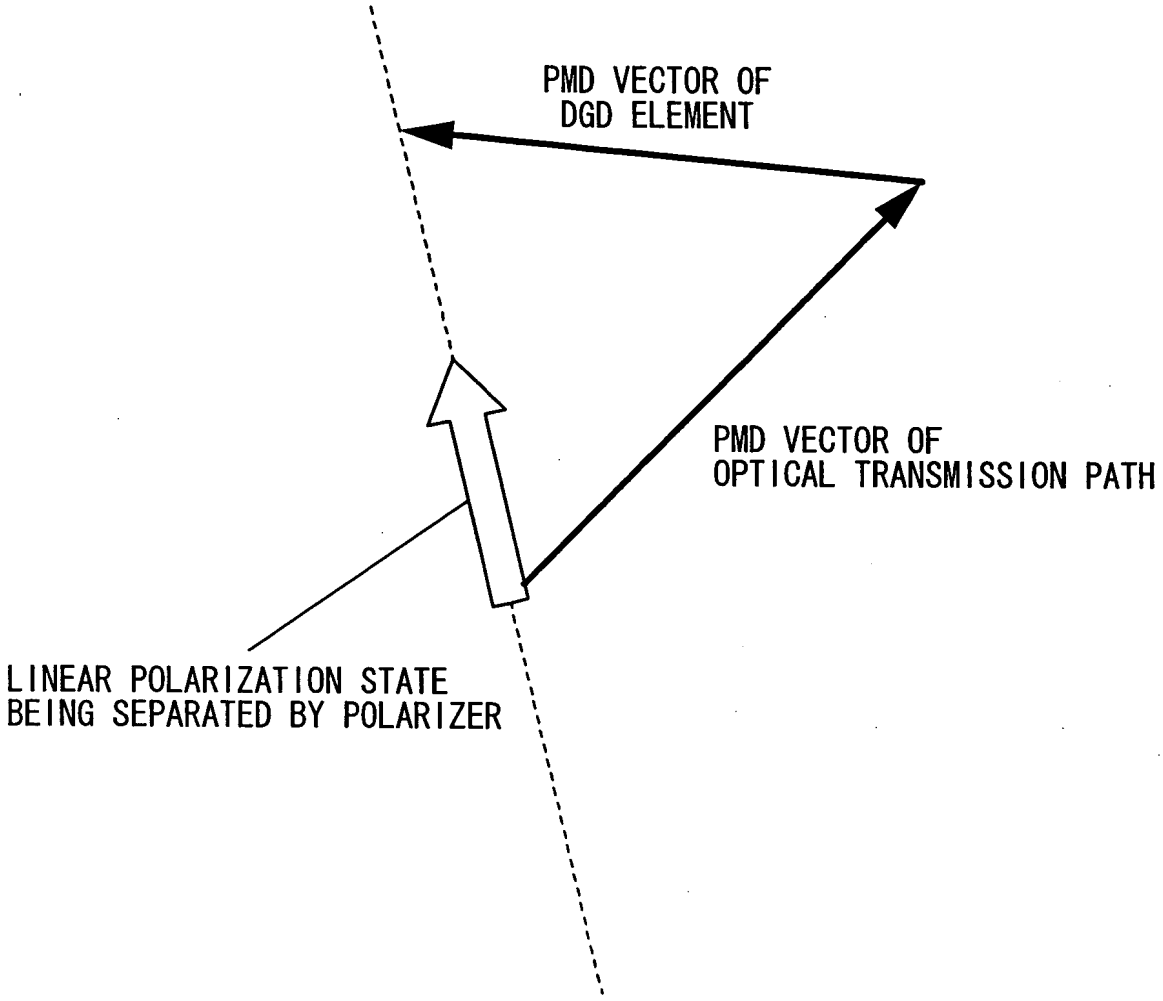

PMD VECTOR OF
DGD ELEMENT
PMD VECTOR OF
OPTICAL TRANSMISSION PATH
LINEAR POLARIZATION STATE
BEING SEPARATED BY POLARIZER

FIG. 7

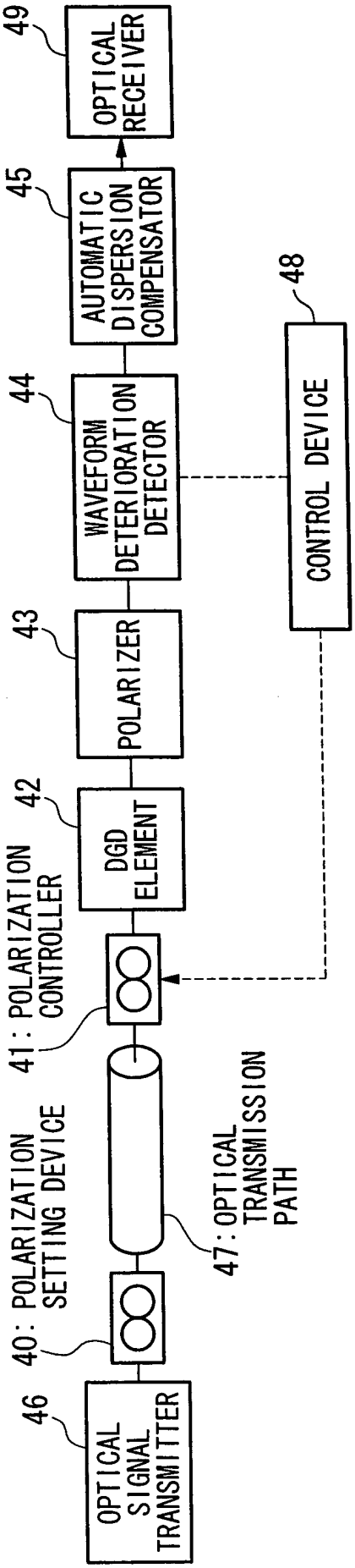

OPTICAL SIGNAL TRANSMITTER
46
40: POLARIZATION SETTING DEVICE
47: OPTICAL TRANSMISSION PATH
41: POLARIZATION CONTROLLER
DGD ELEMENT
42
POLARIZER
43
WAVEFORM DETERIORATION DETECTOR
44
AUTOMATIC DISPERSION COMPENSATOR
45
OPTICAL RECEIVER
49
CONTROL DEVICE
48

FIG. 8

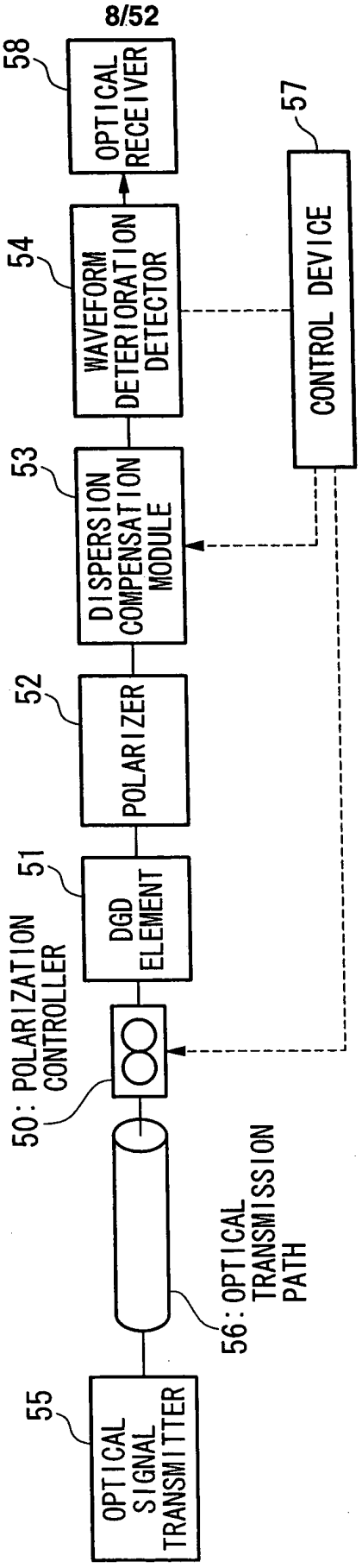

OPTICAL SIGNAL TRANSMITTER
55
56: OPTICAL TRANSMISSION PATH
50: POLARIZATION CONTROLLER
DGD ELEMENT
51
POLARIZER
52
DISPERSION COMPENSATION MODULE
53
WAVEFORM DETERIORATION DETECTOR
54
OPTICAL RECEIVER
58
CONTROL DEVICE
57

FIG. 9

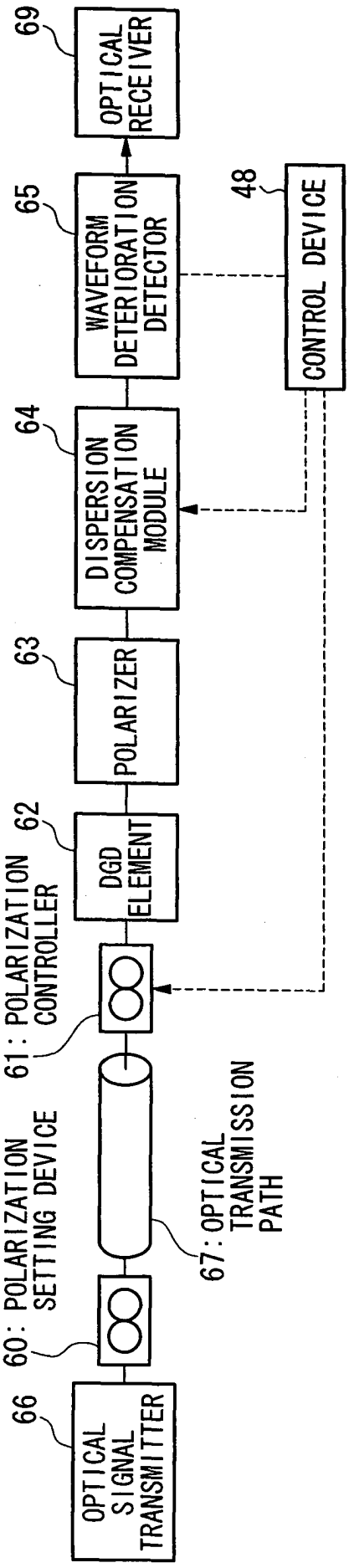

OPTICAL SIGNAL TRANSMITTER
66
60: POLARIZATION SETTING DEVICE
67: OPTICAL TRANSMISSION PATH
61: POLARIZATION CONTROLLER
DGD ELEMENT
62
POLARIZER
63
DISPERSION COMPENSATION MODULE
64
WAVEFORM DETERIORATION DETECTOR
65
OPTICAL RECEIVER
69
CONTROL DEVICE
48

FIG. 10

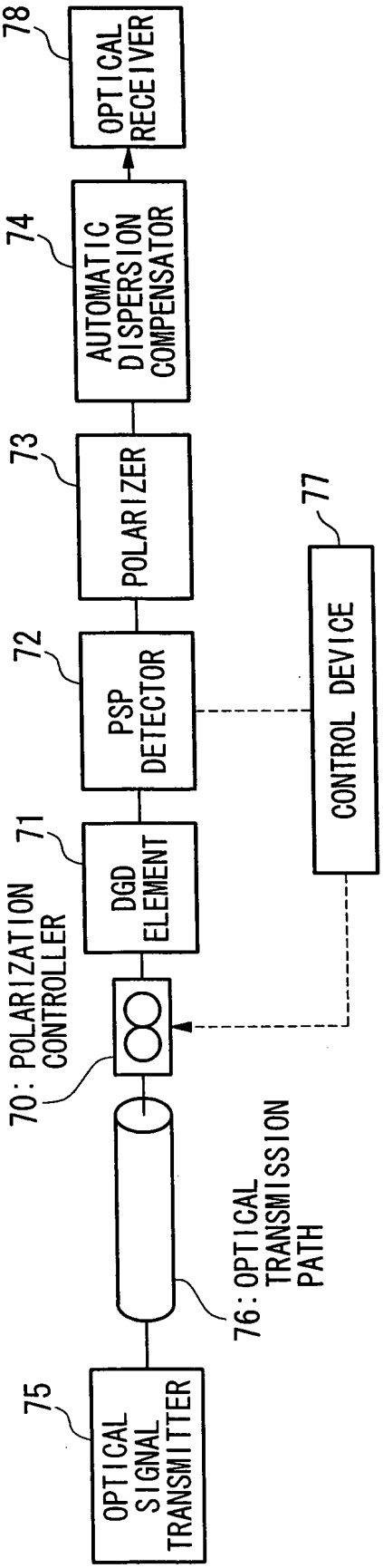

78
OPTICAL RECEIVER
74
AUTOMATIC DISPERSION COMPENSATOR
73
POLARIZER
72
PSP DETECTOR
71
DGD ELEMENT
77
CONTROL DEVICE
70: POLARIZATION CONTROLLER
75
OPTICAL SIGNAL TRANSMITTER
76: OPTICAL TRANSMISSION PATH

FIG. 11

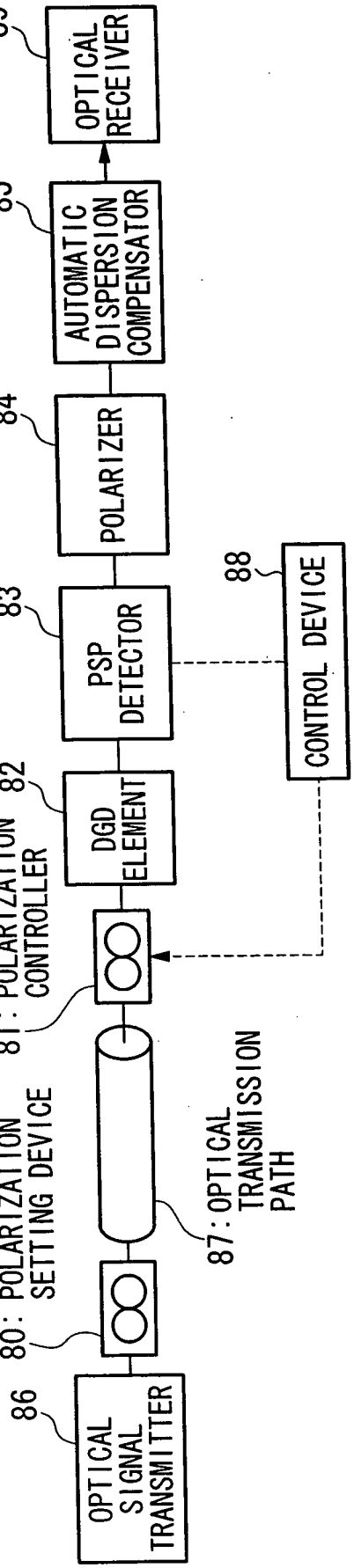

89
OPTICAL RECEIVER
85
AUTOMATIC DISPERSION COMPENSATOR
84
POLARIZER
83
PSP DETECTOR
88
CONTROL DEVICE
82
DGD ELEMENT
81: POLARIZATION CONTROLLER
87: OPTICAL TRANSMISSION PATH
80: POLARIZATION SETTING DEVICE
86
OPTICAL SIGNAL TRANSMITTER

FIG. 12

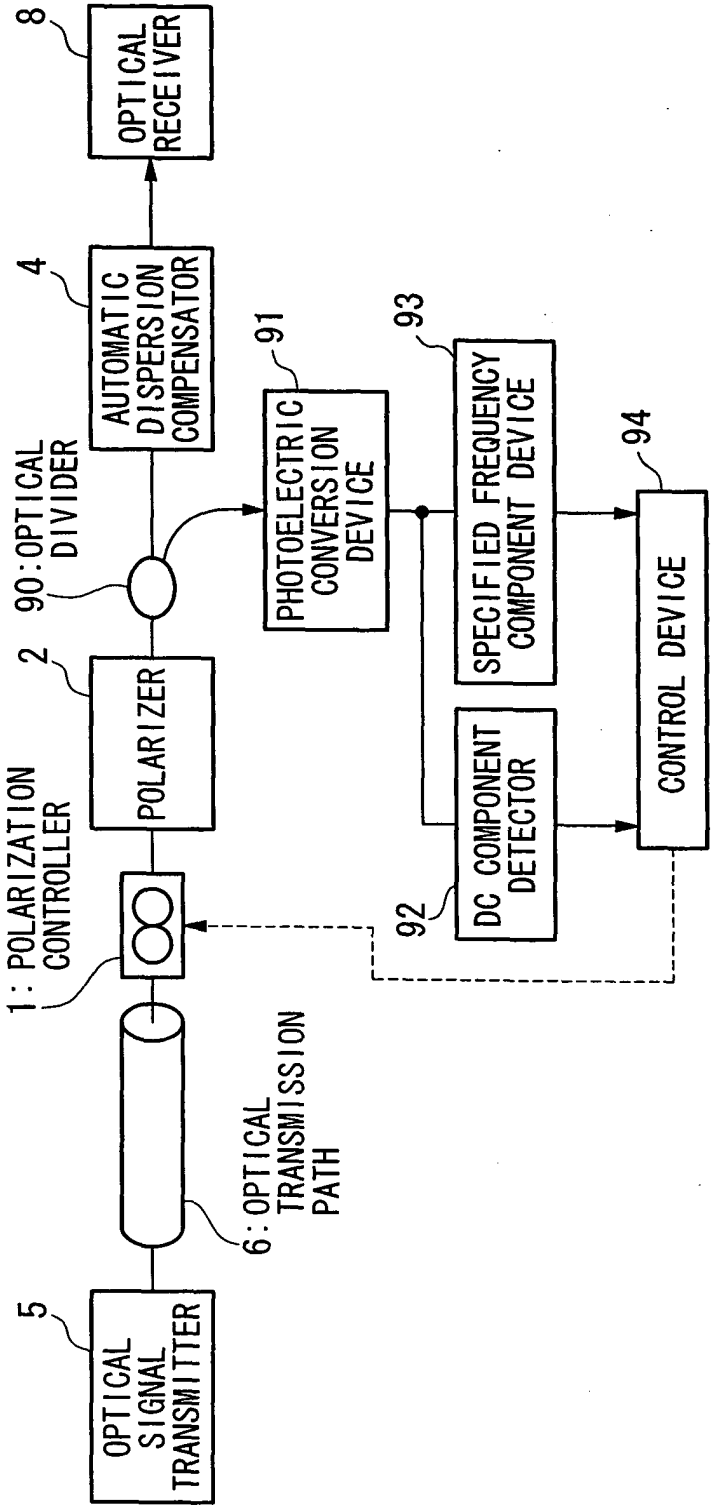

8
OPTICAL RECEIVER
4
AUTOMATIC DISPERSION COMPENSATOR
90: OPTICAL DIVIDER
91
PHOTOELECTRIC CONVERSION DEVICE
93
SPECIFIED FREQUENCY COMPONENT DEVICE
94
CONTROL DEVICE
2
POLARIZER
1: POLARIZATION CONTROLLER
92
DC COMPONENT DETECTOR
6: OPTICAL TRANSMISSION PATH
5
OPTICAL SIGNAL TRANSMITTER

FIG. 13

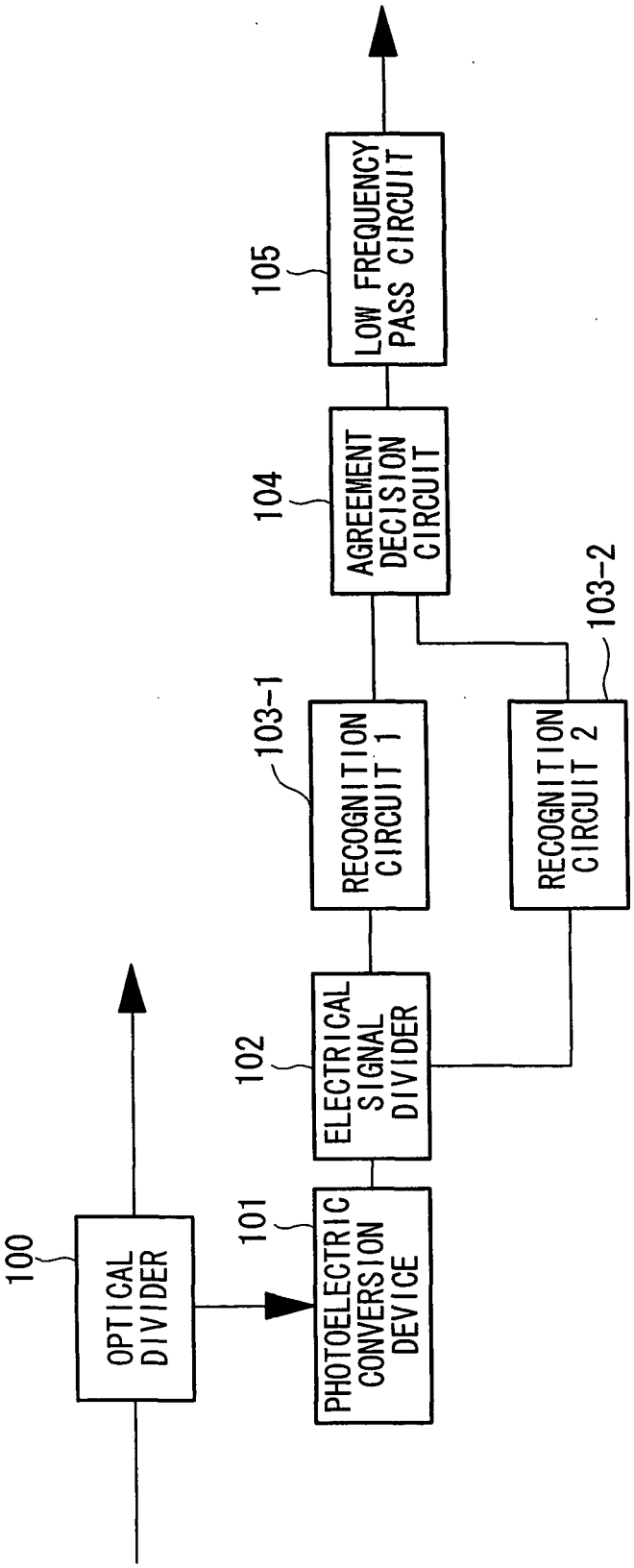
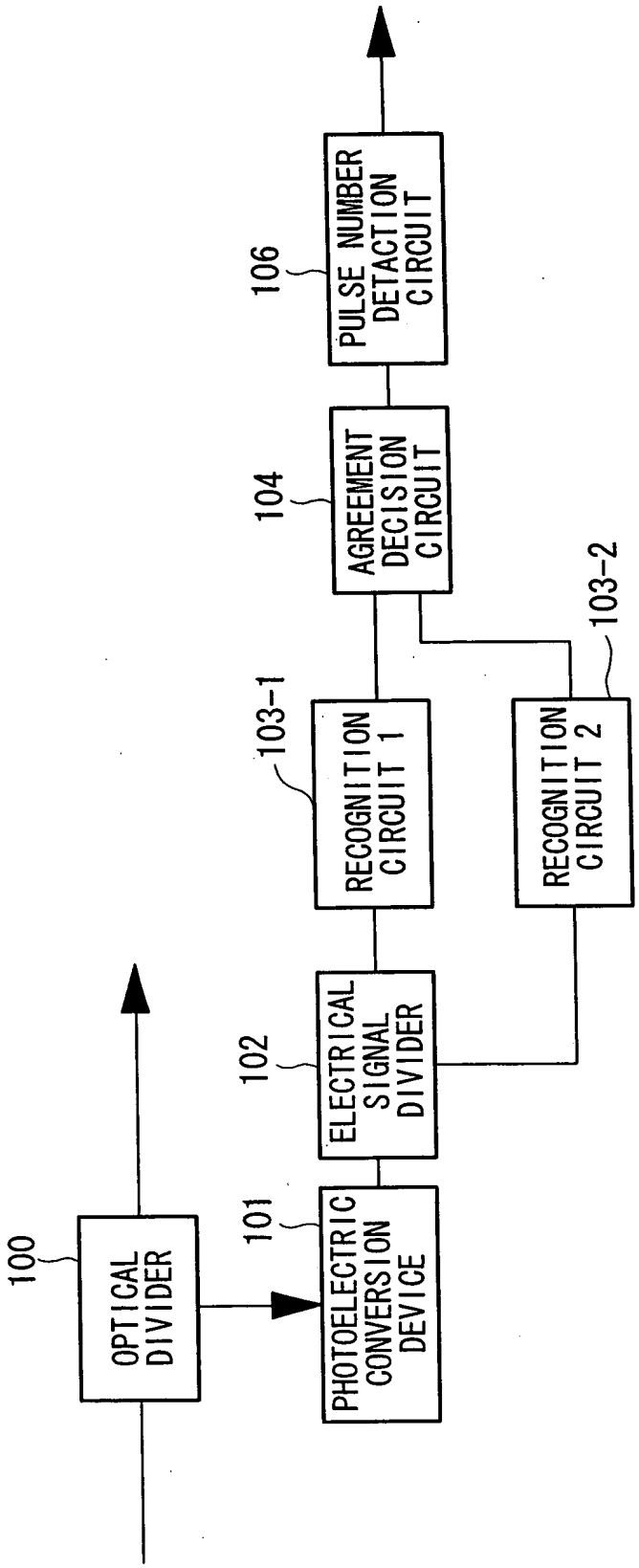

100
OPTICAL DIVIDER
101
PHOTOELECTRIC CONVERSION DEVICE
102
ELECTRICAL SIGNAL DIVIDER
103-1
RECOGNITION CIRCUIT 1
103-2
RECOGNITION CIRCUIT 2
104
AGREEMENT DECISION CIRCUIT
105
LOW FREQUENCY PASS CIRCUIT

FIG. 14


OPTICAL DIVIDER
100
PHOTOELECTRIC CONVERSION DEVICE
101
ELECTRICAL SIGNAL DIVIDER
102
RECOGNITION CIRCUIT 1
103-1
RECOGNITION CIRCUIT 2
103-2
AGREEMENT DECISION CIRCUIT
104
PULSE NUMBER DETACTION CIRCUIT
106

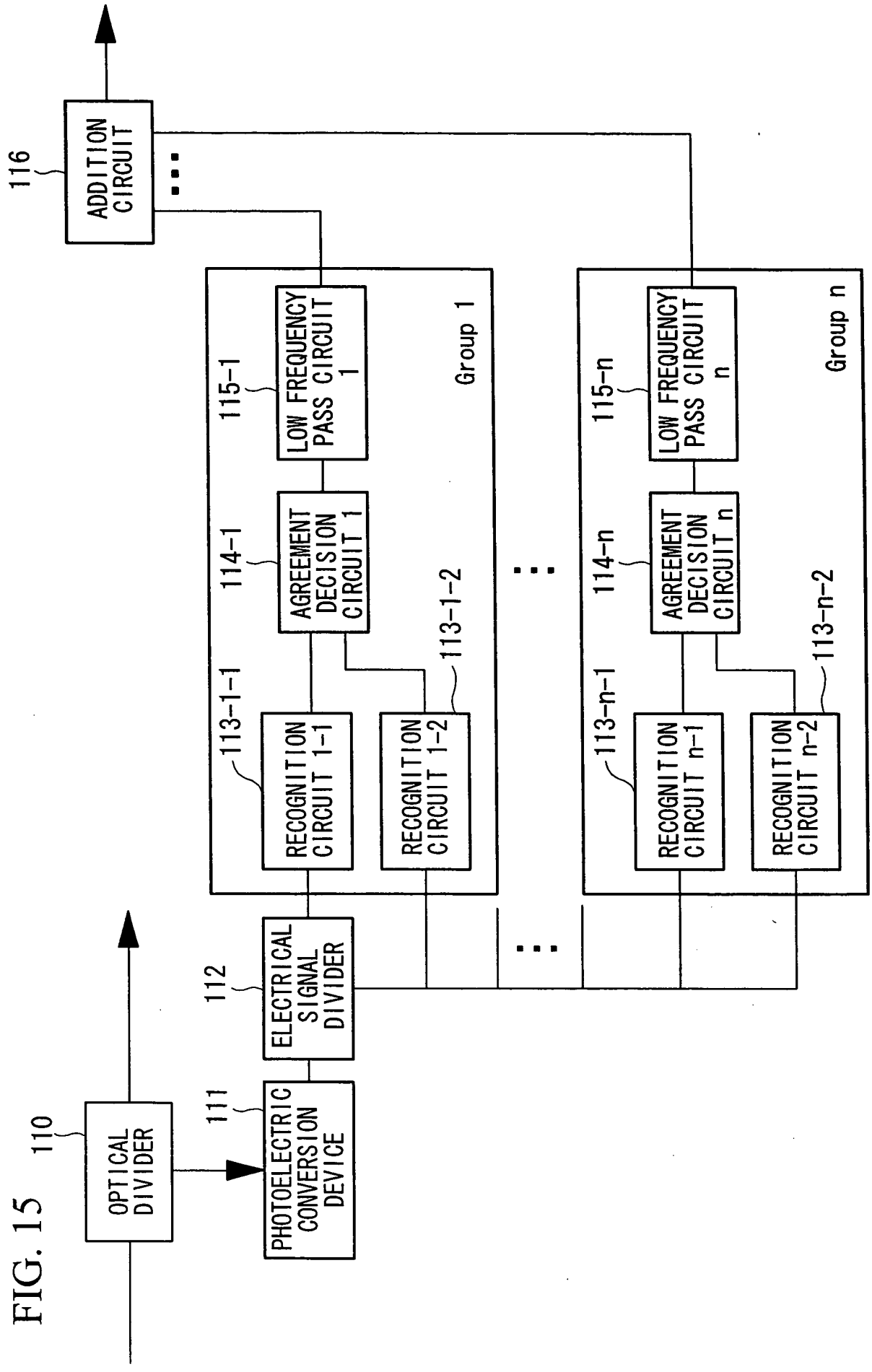

OPTICAL DIVIDER
110
PHOTOELECTRIC CONVERSION DEVICE
111
ELECTRICAL SIGNAL DIVIDER
112
RECOGNITION CIRCUIT 1-1
113-1-1
RECOGNITION CIRCUIT 1-2
113-1-2
AGREEMENT DECISION CIRCUIT 1
114-1
LOW FREQUENCY PASS CIRCUIT 1
115-1
Group 1
RECOGNITION CIRCUIT n-1
113-n-1
RECOGNITION CIRCUIT n-2
113-n-2
AGREEMENT DECISION CIRCUIT n
114-n
LOW FREQUENCY PASS CIRCUIT n
115-n
Group n
ADDITION CIRCUIT
116

FIG. 15

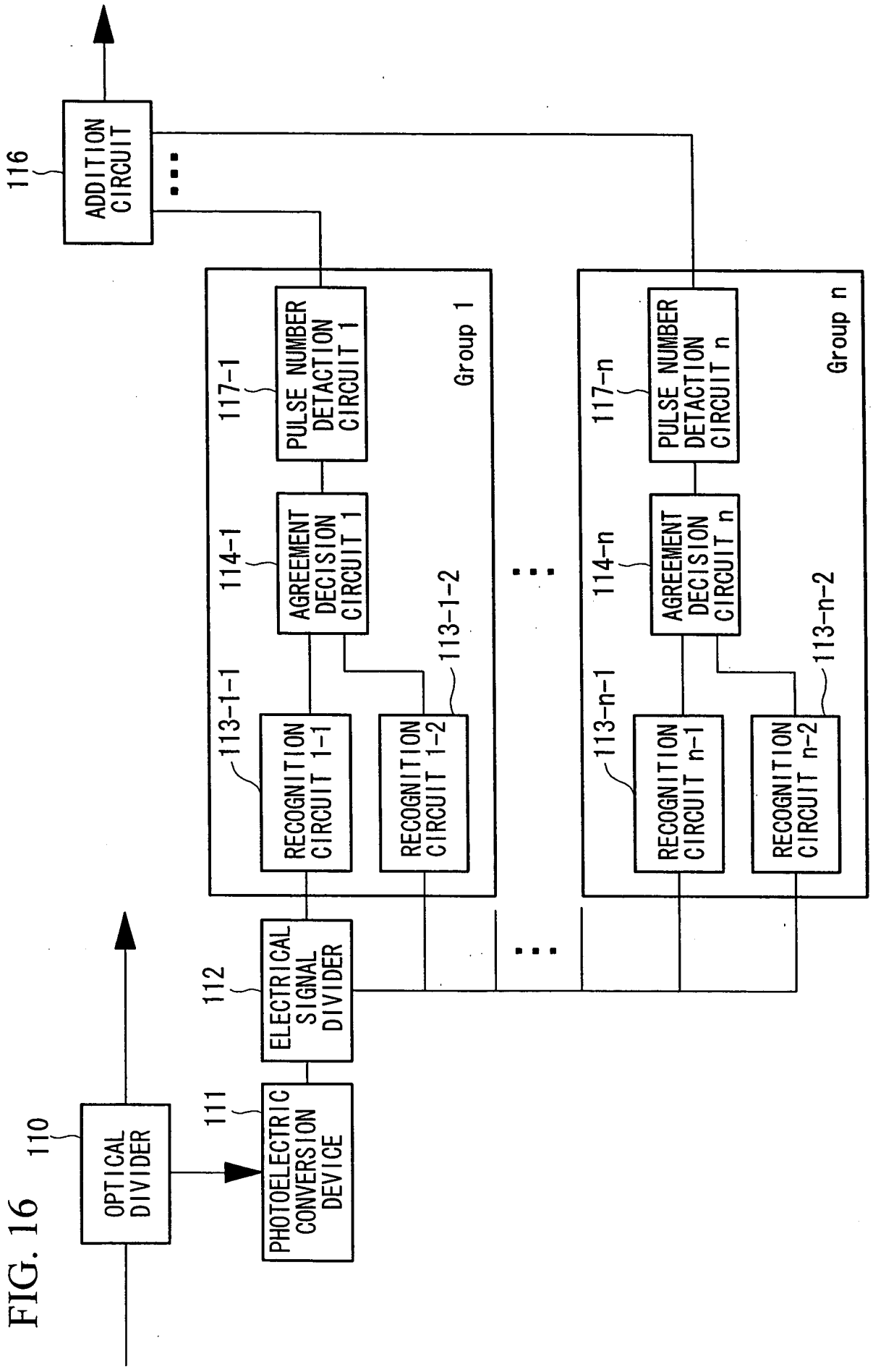

OPTICAL DIVIDER
110
PHOTOELECTRIC CONVERSION DEVICE
111
ELECTRICAL SIGNAL DIVIDER
112
RECOGNITION CIRCUIT 1-1
113-1-1
RECOGNITION CIRCUIT 1-2
113-1-2
AGREEMENT DECISION CIRCUIT 1
114-1
PULSE NUMBER DETACTION CIRCUIT 1
117-1
Group 1
RECOGNITION CIRCUIT n-1
113-n-1
RECOGNITION CIRCUIT n-2
113-n-2
AGREEMENT DECISION CIRCUIT n
114-n
PULSE NUMBER DETACTION CIRCUIT n
117-n
Group n
ADDITION CIRCUIT
116

FIG. 16

FIG. 17

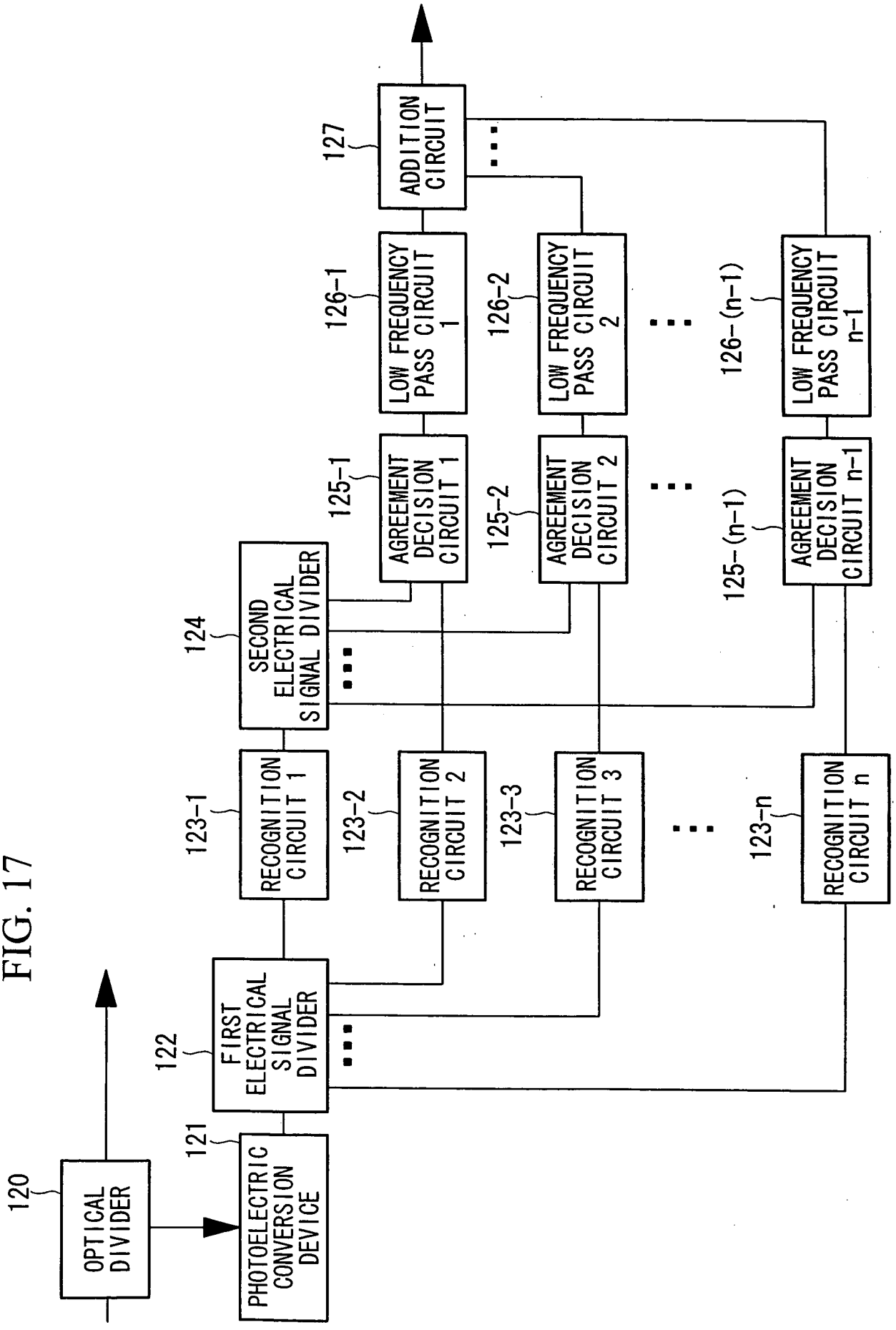

120
OPTICAL DIVIDER
121
PHOTOELECTRIC CONVERSION DEVICE
122
FIRST ELECTRICAL SIGNAL DIVIDER
123-1
RECOGNITION CIRCUIT 1
123-2
RECOGNITION CIRCUIT 2
123-3
RECOGNITION CIRCUIT 3
123-n
RECOGNITION CIRCUIT n
124
SECOND ELECTRICAL SIGNAL DIVIDER
125-1
AGREEMENT DECISION CIRCUIT 1
125-2
AGREEMENT DECISION CIRCUIT 2
125-(n-1)
AGREEMENT DECISION CIRCUIT n-1
126-1
LOW FREQUENCY PASS CIRCUIT 1
126-2
LOW FREQUENCY PASS CIRCUIT 2
126-(n-1)
LOW FREQUENCY PASS CIRCUIT n-1
127
ADDITION CIRCUIT

FIG. 18

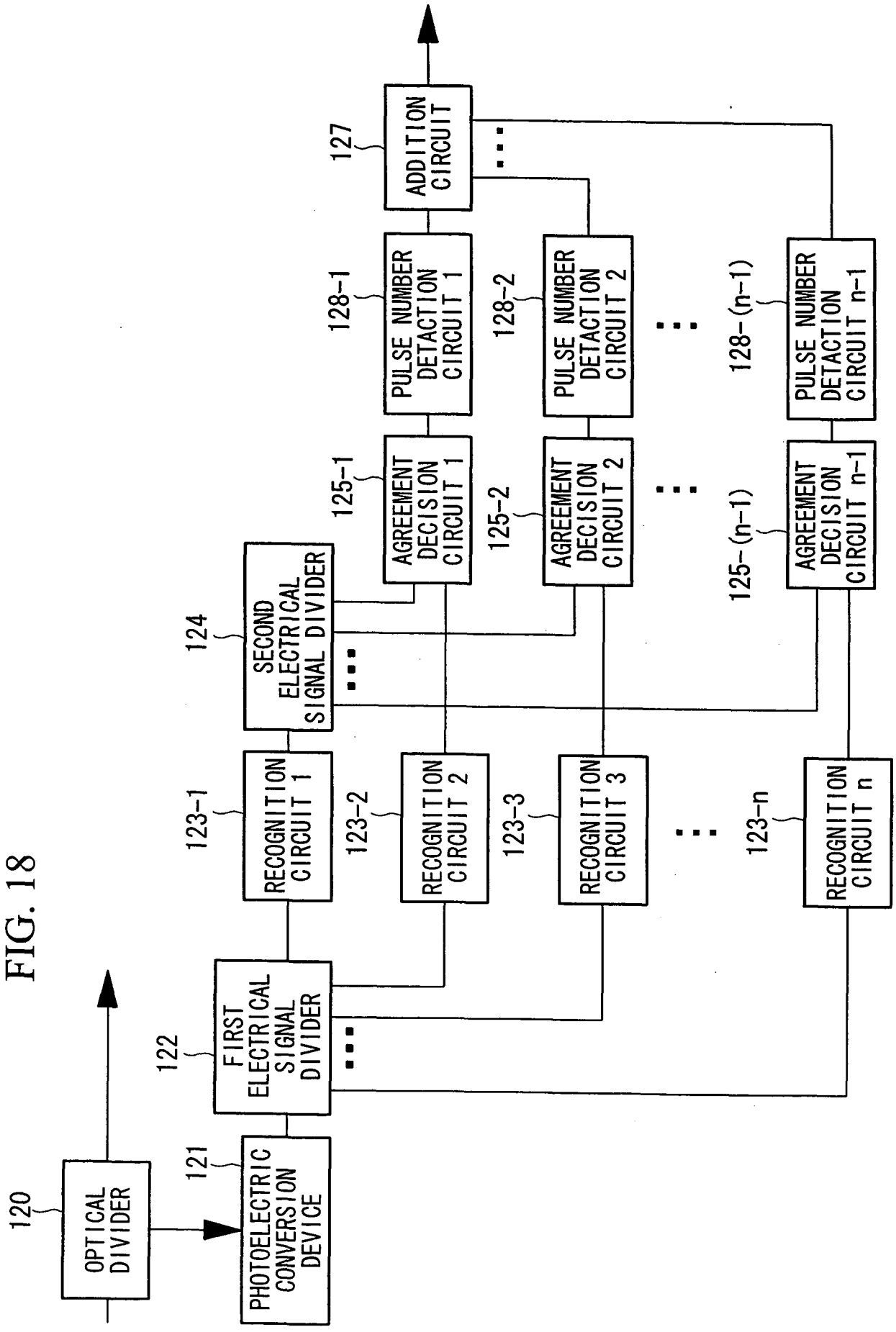

120
OPTICAL DIVIDER
121
PHOTOELECTRIC CONVERSION DEVICE
122
FIRST ELECTRICAL SIGNAL DIVIDER
123-1
RECOGNITION CIRCUIT 1
123-2
RECOGNITION CIRCUIT 2
123-3
RECOGNITION CIRCUIT 3
123-n
RECOGNITION CIRCUIT n
124
SECOND ELECTRICAL SIGNAL DIVIDER
125-1
AGREEMENT DECISION CIRCUIT 1
125-2
AGREEMENT DECISION CIRCUIT 2
125-(n-1)
AGREEMENT DECISION CIRCUIT n-1
128-1
PULSE NUMBER DETACTION CIRCUIT 1
128-2
PULSE NUMBER DETACTION CIRCUIT 2
128-(n-1)
PULSE NUMBER DETACTION CIRCUIT n-1
127
ADDITION CIRCUIT

FIG. 19

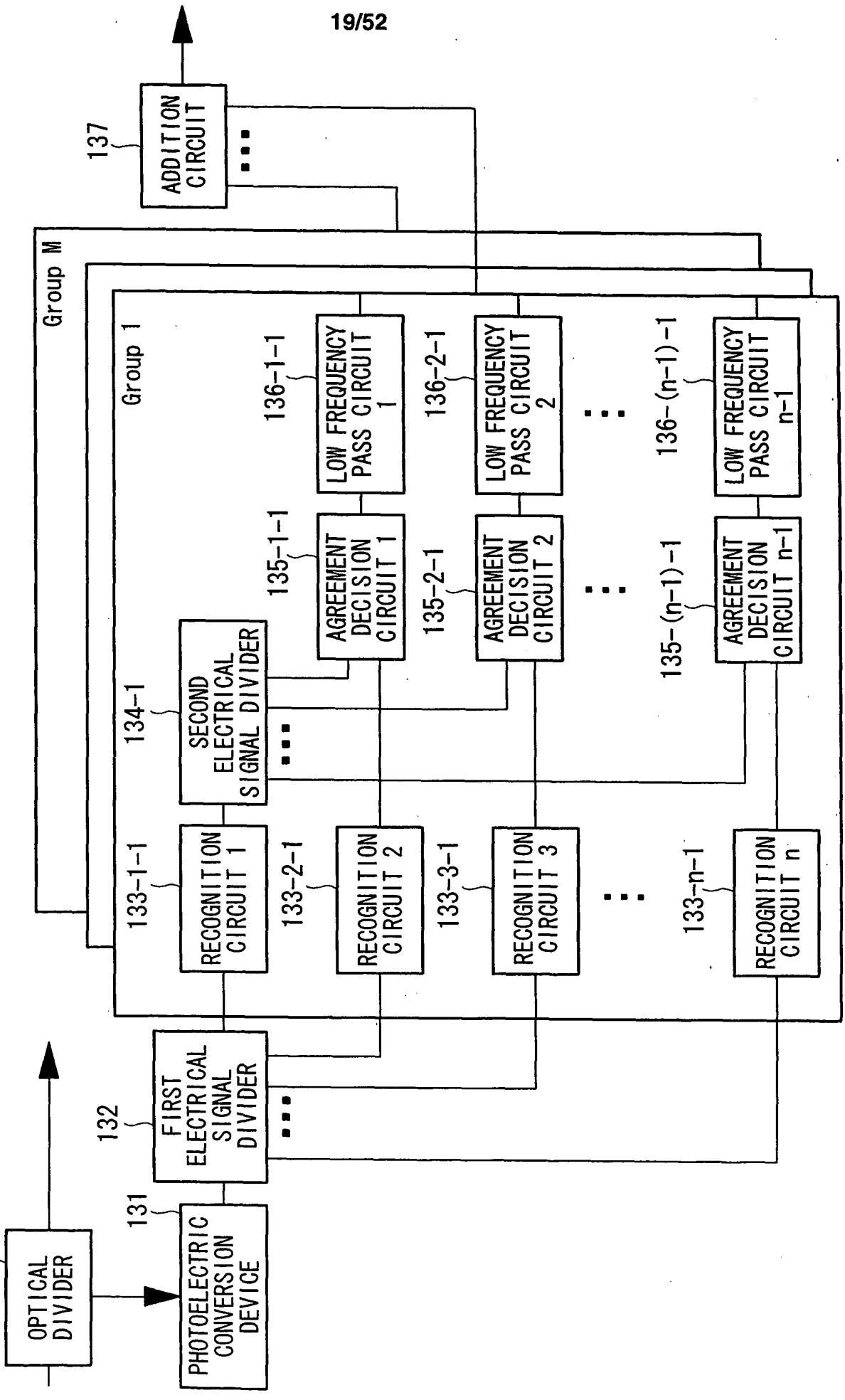

130
OPTICAL DIVIDER
131
PHOTOELECTRIC CONVERSION DEVICE
132
FIRST ELECTRICAL SIGNAL DIVIDER
Group M
Group 1
134-1
SECOND ELECTRICAL SIGNAL DIVIDER
133-1-1
RECOGNITION CIRCUIT 1
133-2-1
RECOGNITION CIRCUIT 2
133-3-1
RECOGNITION CIRCUIT 3
133-n-1
RECOGNITION CIRCUIT n
135-1-1
AGREEMENT DECISION CIRCUIT 1
135-2-1
AGREEMENT DECISION CIRCUIT 2
135-(n-1)-1
AGREEMENT DECISION CIRCUIT n-1
136-1-1
LOW FREQUENCY PASS CIRCUIT 1
136-2-1
LOW FREQUENCY PASS CIRCUIT 2
136-(n-1)-1
LOW FREQUENCY PASS CIRCUIT n-1
137
ADDITION CIRCUIT

FIG. 20

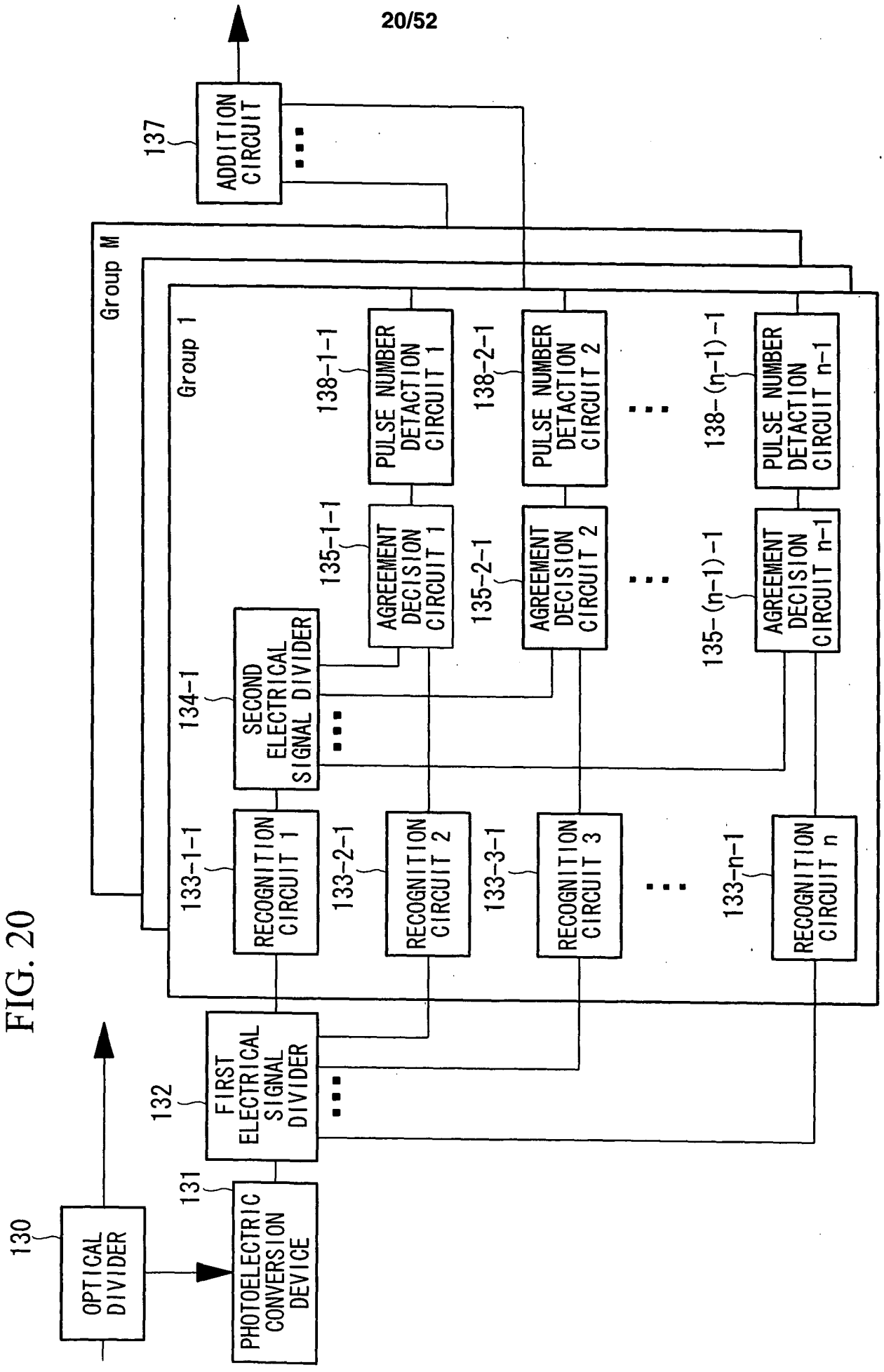

130
OPTICAL DIVIDER
131
PHOTOELECTRIC CONVERSION DEVICE
132
FIRST ELECTRICAL SIGNAL DIVIDER
133-1-1
RECOGNITION CIRCUIT 1
133-2-1
RECOGNITION CIRCUIT 2
133-3-1
RECOGNITION CIRCUIT 3
133-n-1
RECOGNITION CIRCUIT n
134-1
SECOND ELECTRICAL SIGNAL DIVIDER
135-1-1
AGREEMENT DECISION CIRCUIT 1
135-2-1
AGREEMENT DECISION CIRCUIT 2
135-(n-1)-1
AGREEMENT DECISION CIRCUIT n-1
138-1-1
PULSE NUMBER DETACTION CIRCUIT 1
138-2-1
PULSE NUMBER DETACTION CIRCUIT 2
138-(n-1)-1
PULSE NUMBER DETACTION CIRCUIT n-1
137
ADDITION CIRCUIT
Group 1
Group M

FIG. 21

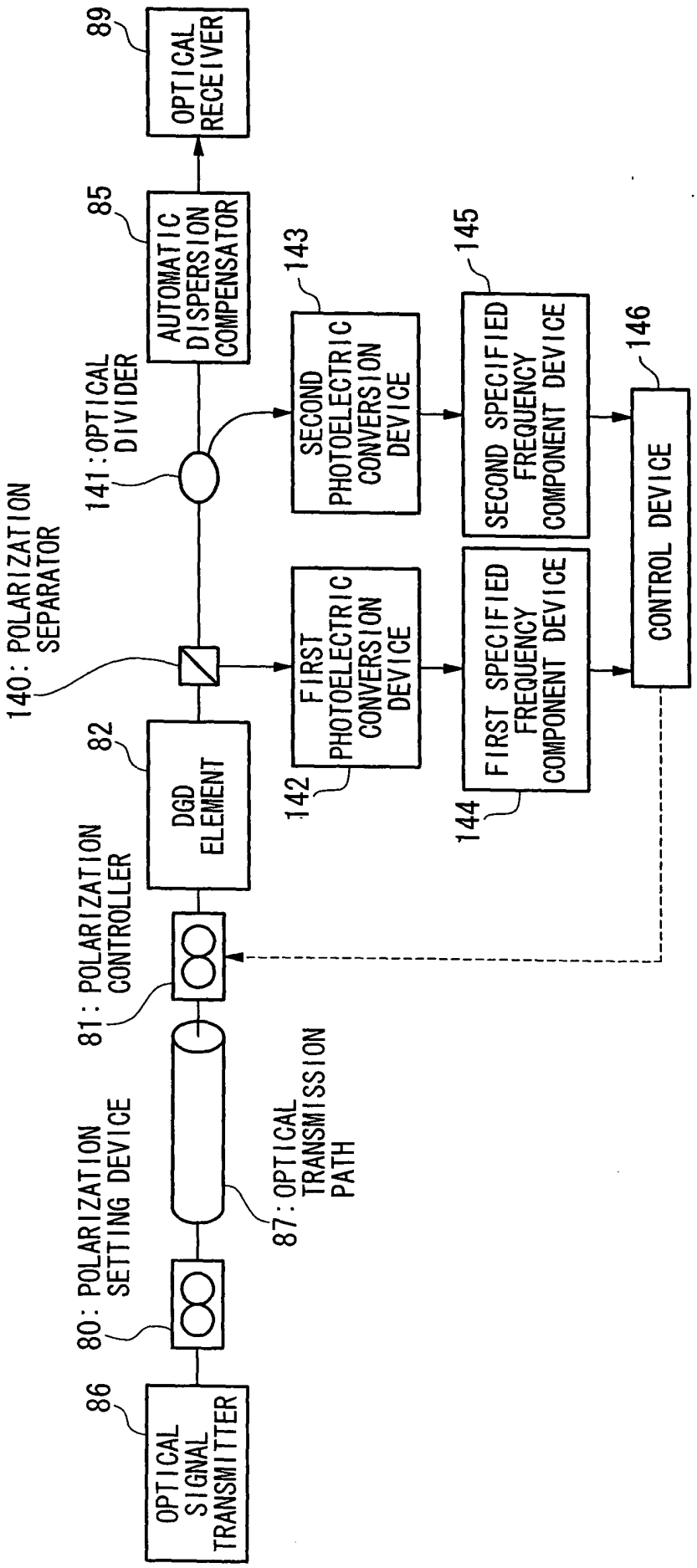

OPTICAL SIGNAL TRANSMITTER
86
80: POLARIZATION SETTING DEVICE
87: OPTICAL TRANSMISSION PATH
81: POLARIZATION CONTROLLER
DGD ELEMENT
82
140: POLARIZATION SEPARATOR
141: OPTICAL DIVIDER
AUTOMATIC DISPERSION COMPENSATOR
85
OPTICAL RECEIVER
89
FIRST PHOTOELECTRIC CONVERSION DEVICE
142
SECOND PHOTOELECTRIC CONVERSION DEVICE
143
FIRST SPECIFIED FREQUENCY COMPONENT DEVICE
144
SECOND SPECIFIED FREQUENCY COMPONENT DEVICE
145
CONTROL DEVICE
146

FIG. 22

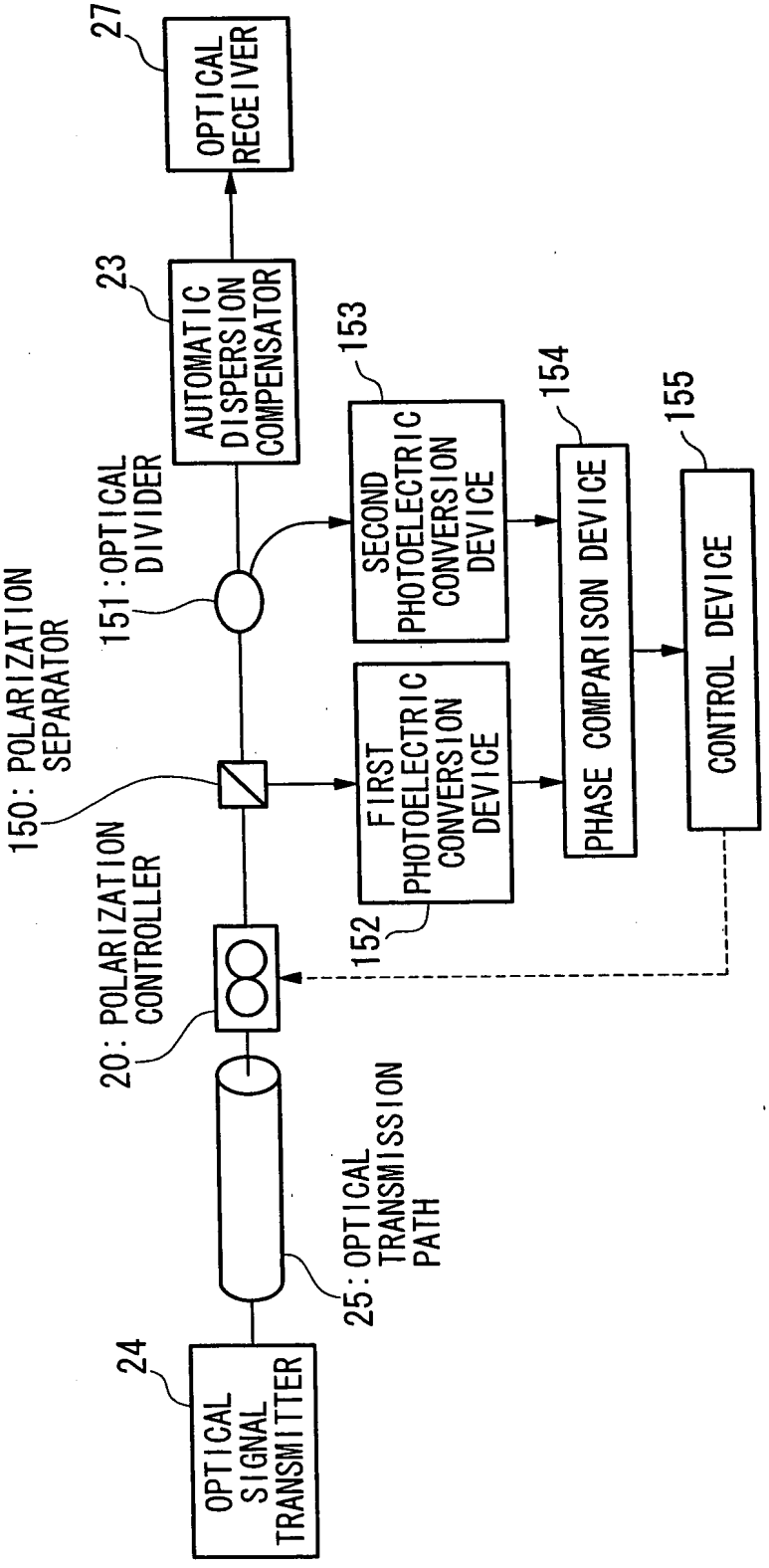

27
OPTICAL RECEIVER
23
AUTOMATIC DISPERSION COMPENSATOR
153
SECOND PHOTOELECTRIC CONVERSION DEVICE
154
PHASE COMPARISON DEVICE
155
CONTROL DEVICE
151: OPTICAL DIVIDER
150: POLARIZATION SEPARATOR
FIRST PHOTOELECTRIC CONVERSION DEVICE
152
20: POLARIZATION CONTROLLER
25: OPTICAL TRANSMISSION PATH
24
OPTICAL SIGNAL TRANSMITTER

FIG. 23

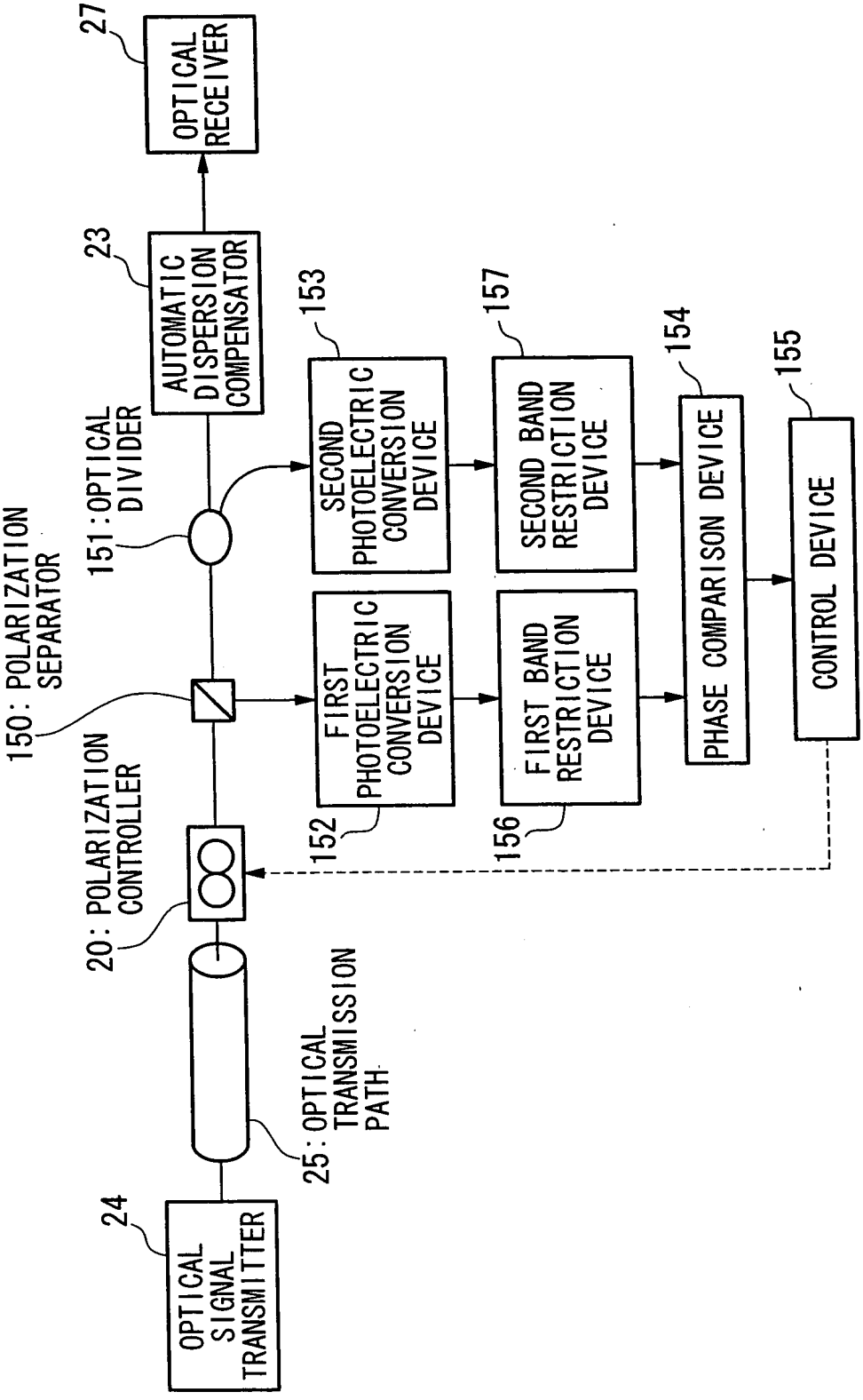

OPTICAL SIGNAL TRANSMITTER
24
25: OPTICAL TRANSMISSION PATH
20: POLARIZATION CONTROLLER
150: POLARIZATION SEPARATOR
151: OPTICAL DIVIDER
AUTOMATIC DISPERSION COMPENSATOR
23
OPTICAL RECEIVER
27
FIRST PHOTOELECTRIC CONVERSION DEVICE
152
SECOND PHOTOELECTRIC CONVERSION DEVICE
153
FIRST BAND RESTRICTION DEVICE
156
SECOND BAND RESTRICTION DEVICE
157
PHASE COMPARISON DEVICE
154
CONTROL DEVICE
155

FIG. 24

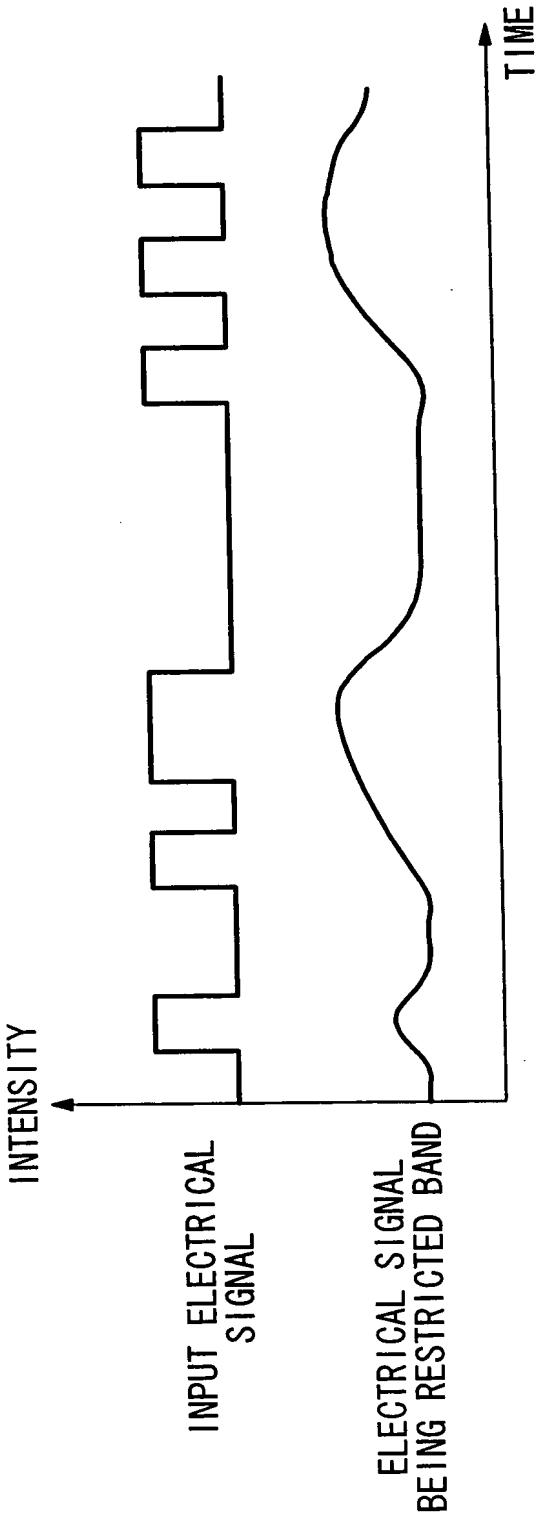

INTENSITY
TIME
INPUT ELECTRICAL SIGNAL
ELECTRICAL SIGNAL BEING RESTRICTED BAND

FIG. 25

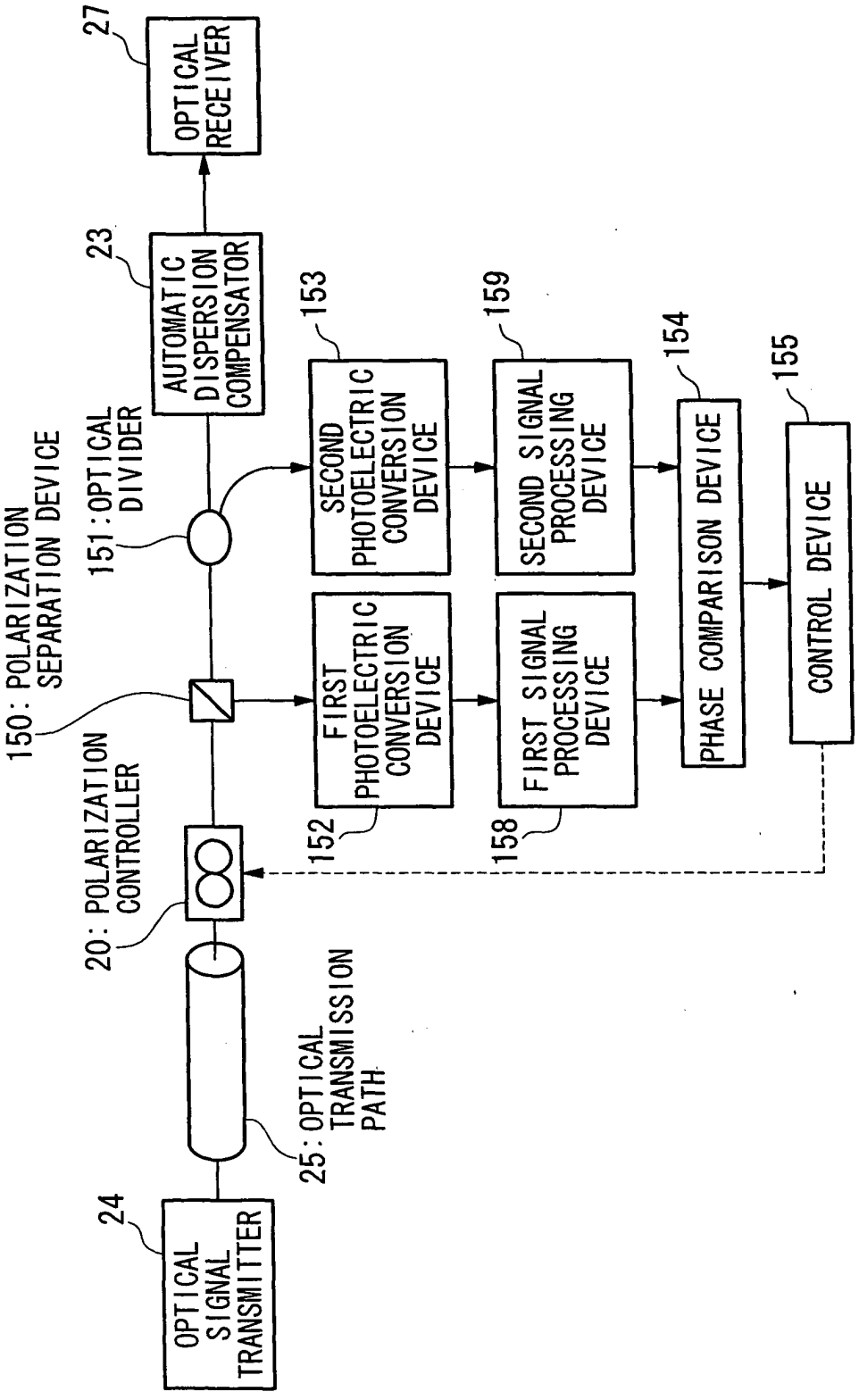

OPTICAL SIGNAL TRANSMITTER
24
25: OPTICAL TRANSMISSION PATH
20: POLARIZATION CONTROLLER
150: POLARIZATION SEPARATION DEVICE
151: OPTICAL DIVIDER
AUTOMATIC DISPERSION COMPENSATOR
23
OPTICAL RECEIVER
27
FIRST PHOTOELECTRIC CONVERSION DEVICE
152
SECOND PHOTOELECTRIC CONVERSION DEVICE
153
FIRST SIGNAL PROCESSING DEVICE
158
SECOND SIGNAL PROCESSING DEVICE
159
PHASE COMPARISON DEVICE
154
CONTROL DEVICE
155

FIG. 26

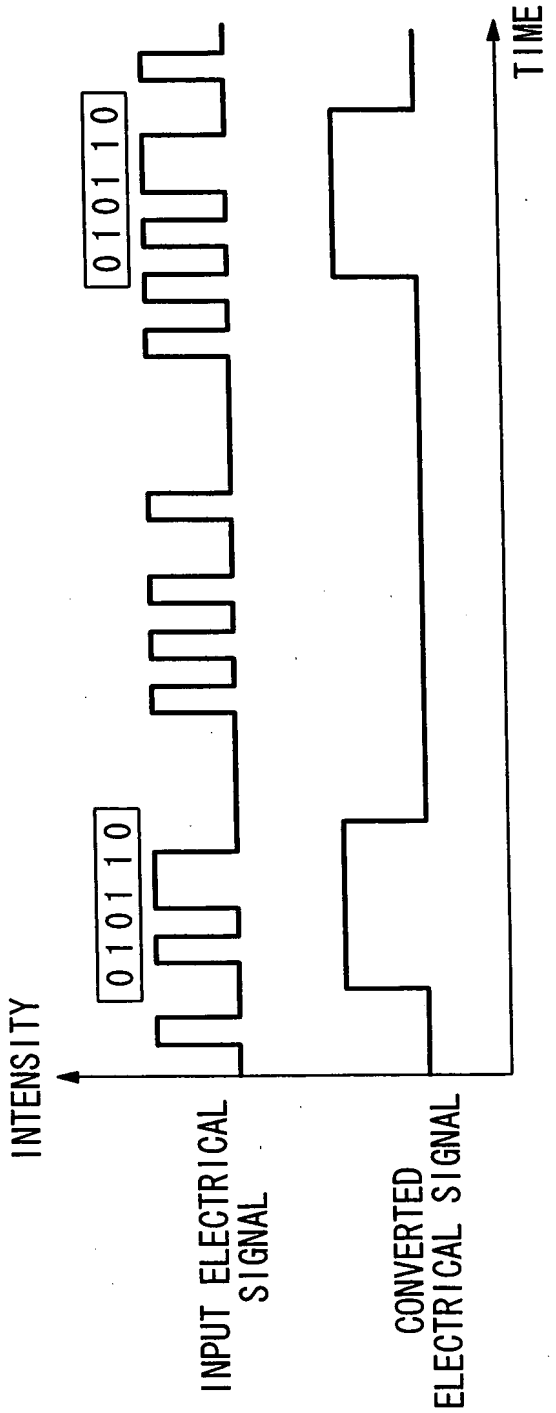

INTENSITY
TIME
0 1 0 1 1 0
0 1 0 1 1 0
INPUT ELECTRICAL SIGNAL
CONVERTED ELECTRICAL SIGNAL

FIG. 27

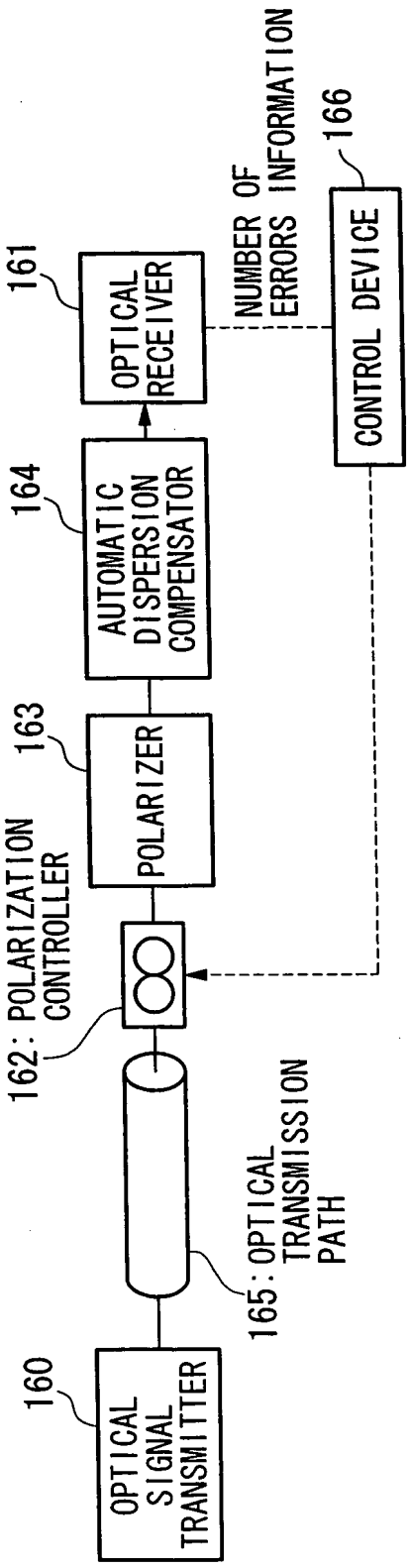

160
OPTICAL SIGNAL TRANSMITTER
165: OPTICAL TRANSMISSION PATH
162: POLARIZATION CONTROLLER
163
POLARIZER
164
AUTOMATIC DISPERSION COMPENSATOR
161
OPTICAL RECEIVER
NUMBER OF ERRORS INFORMATION
166
CONTROL DEVICE

FIG. 28

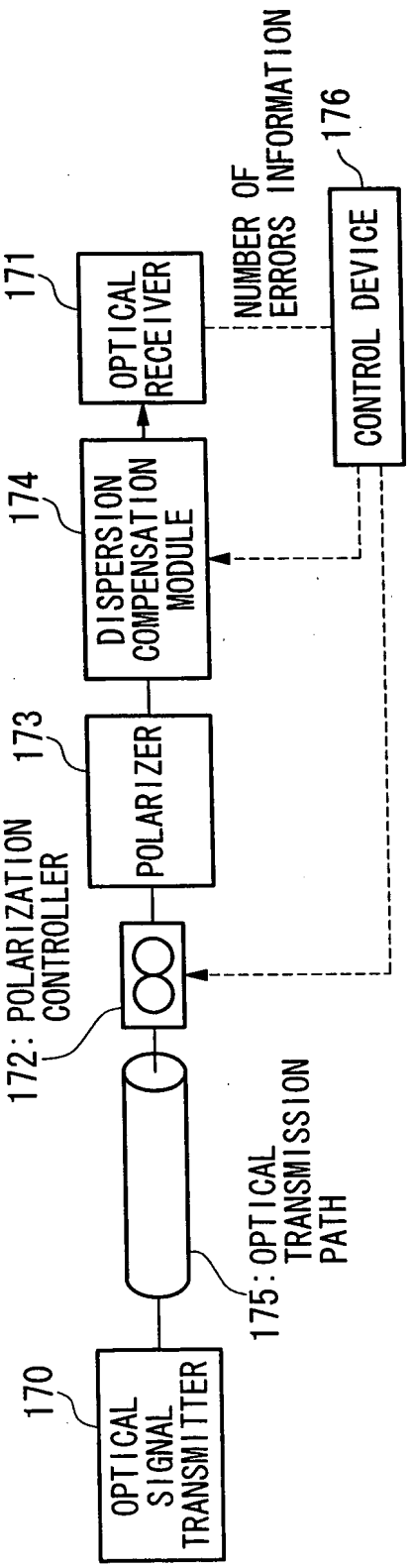

170
OPTICAL SIGNAL TRANSMITTER
175: OPTICAL TRANSMISSION PATH
172: POLARIZATION CONTROLLER
173
POLARIZER
174
DISPERSION COMPENSATION MODULE
171
OPTICAL RECEIVER
NUMBER OF ERRORS INFORMATION
176
CONTROL DEVICE

FIG. 29

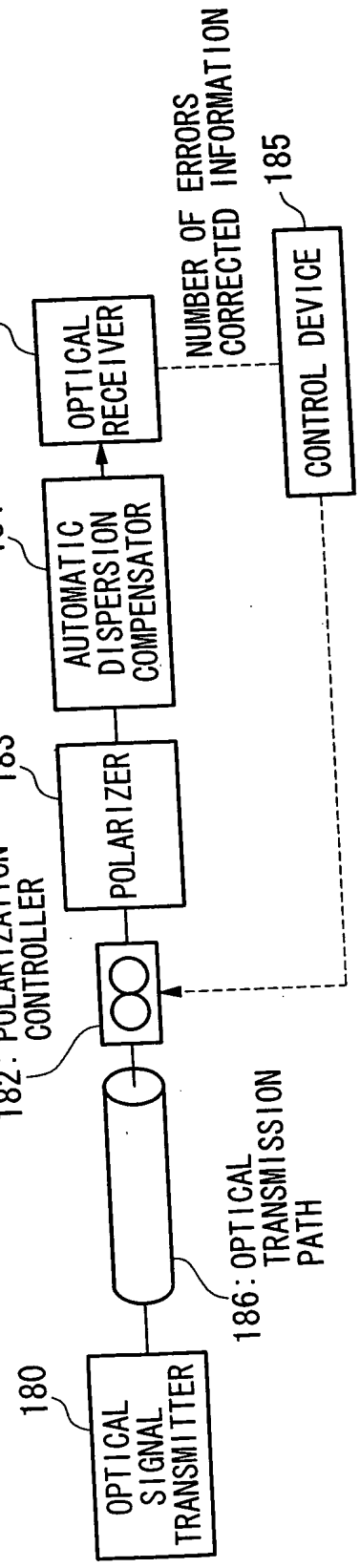

OPTICAL SIGNAL TRANSMITTER
180
186: OPTICAL TRANSMISSION PATH
182: POLARIZATION CONTROLLER
POLARIZER
183
AUTOMATIC DISPERSION COMPENSATOR
184
OPTICAL RECEIVER
181
NUMBER OF ERRORS CORRECTED INFORMATION
CONTROL DEVICE
185

FIG. 30

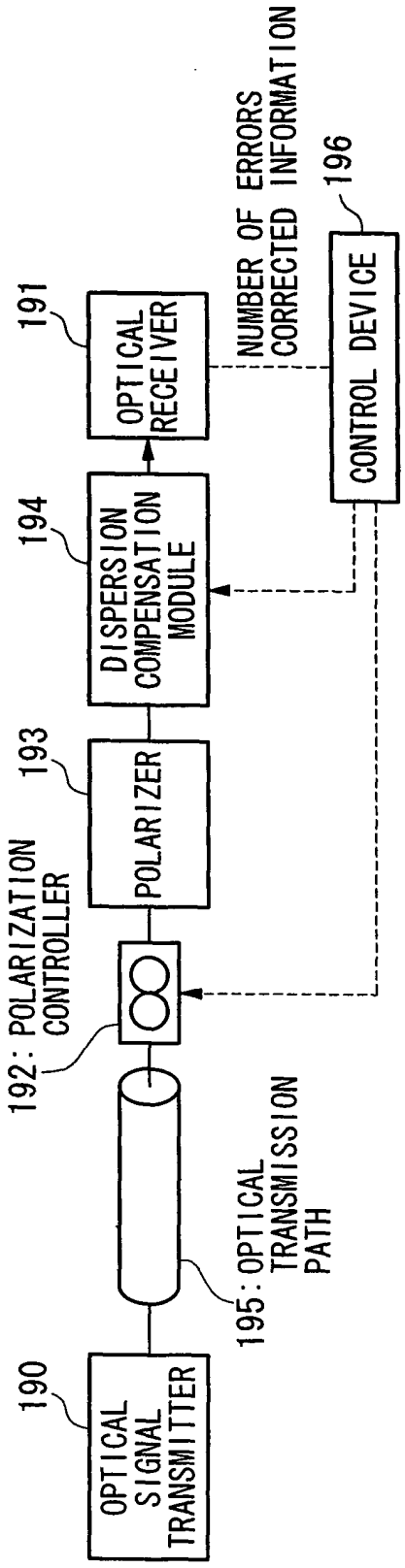

190
OPTICAL SIGNAL TRANSMITTER
195: OPTICAL TRANSMISSION PATH
192: POLARIZATION CONTROLLER
193
POLARIZER
194
DISPERSION COMPENSATION MODULE
191
OPTICAL RECEIVER
NUMBER OF ERRORS CORRECTED INFORMATION
196
CONTROL DEVICE

FIG. 31

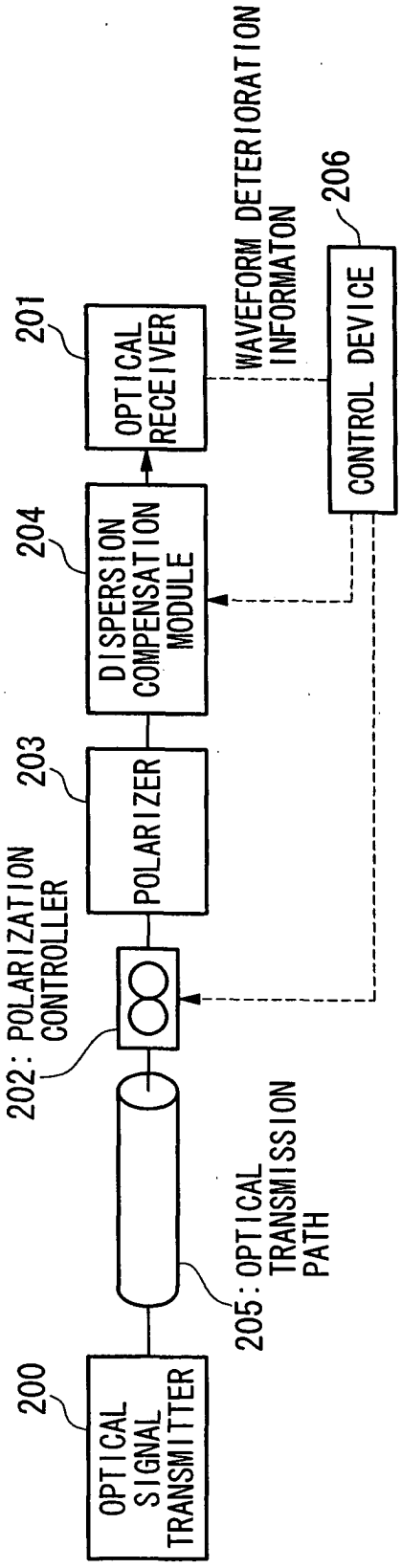

200
OPTICAL SIGNAL TRANSMITTER
205: OPTICAL TRANSMISSION PATH
202: POLARIZATION CONTROLLER
203
POLARIZER
204
DISPERSION COMPENSATION MODULE
201
OPTICAL RECEIVER
WAVEFORM DETERIORATION INFORMATON
206
CONTROL DEVICE

FIG. 32

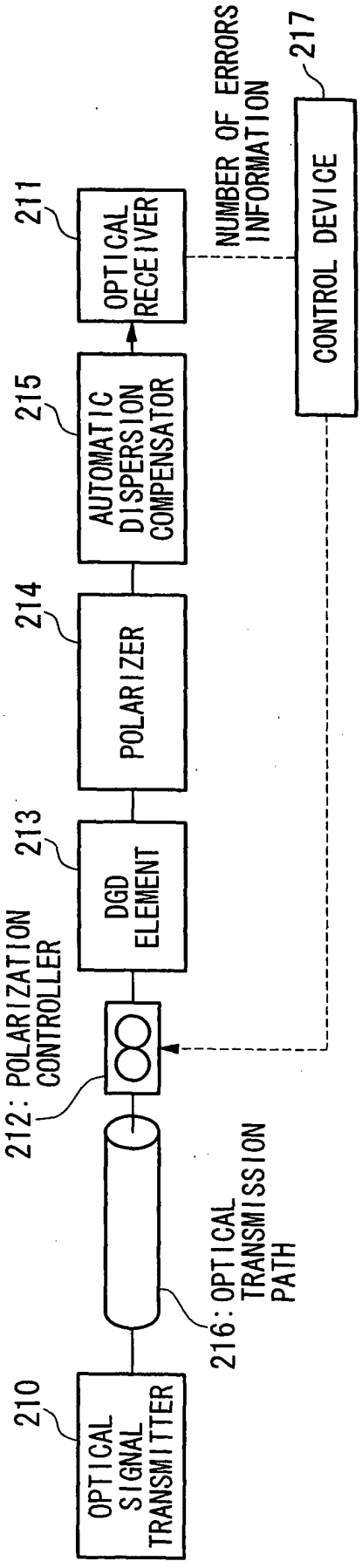

OPTICAL SIGNAL TRANSMITTER
210
216: OPTICAL TRANSMISSION PATH
212: POLARIZATION CONTROLLER
DGD ELEMENT
213
POLARIZER
214
AUTOMATIC DISPERSION COMPENSATOR
215
OPTICAL RECEIVER
211
NUMBER OF ERRORS INFORMATION
CONTROL DEVICE
217

FIG. 33

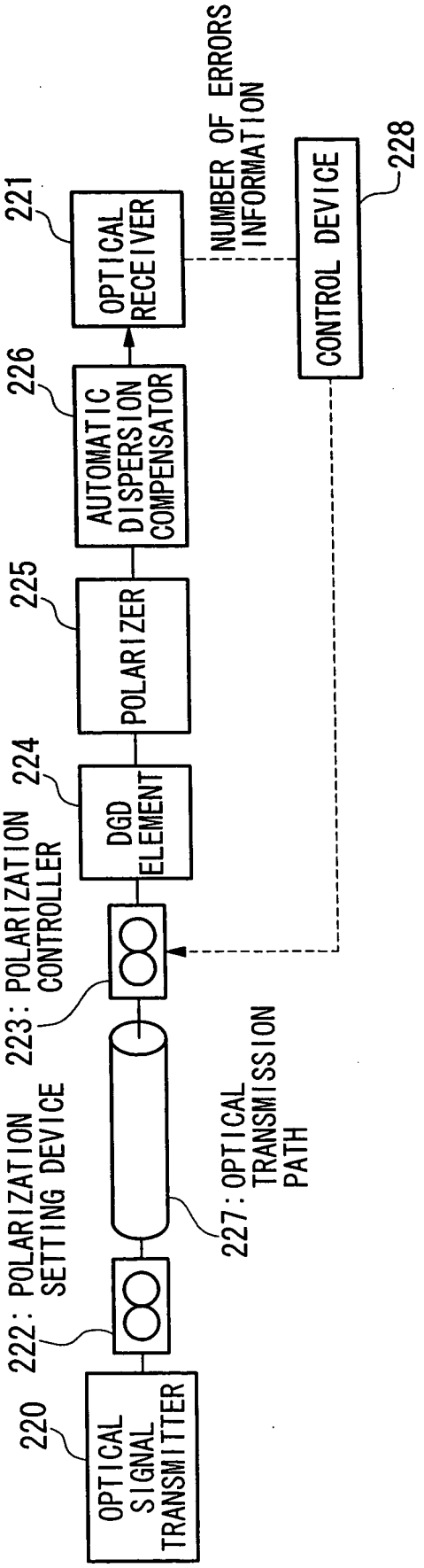

220
OPTICAL SIGNAL TRANSMITTER
222: POLARIZATION SETTING DEVICE
223: POLARIZATION CONTROLLER
224
DGD ELEMENT
225
POLARIZER
226
AUTOMATIC DISPERSION COMPENSATOR
221
OPTICAL RECEIVER
NUMBER OF ERRORS INFORMATION
228
CONTROL DEVICE
227: OPTICAL TRANSMISSION PATH

FIG. 34

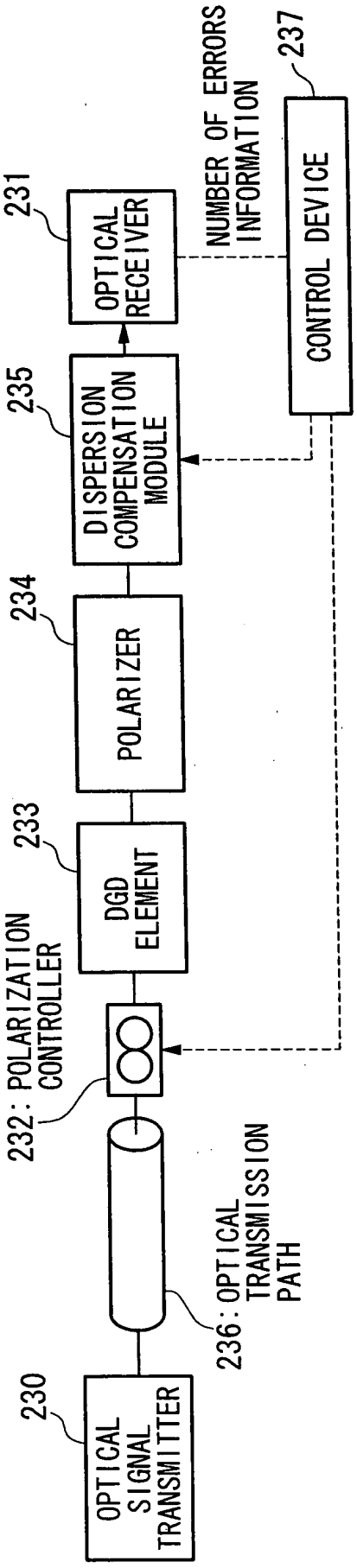

OPTICAL SIGNAL TRANSMITTER
230
236: OPTICAL TRANSMISSION PATH
232: POLARIZATION CONTROLLER
DGD ELEMENT
233
POLARIZER
234
DISPERSION COMPENSATION MODULE
235
OPTICAL RECEIVER
231
NUMBER OF ERRORS INFORMATION
CONTROL DEVICE
237

FIG. 35

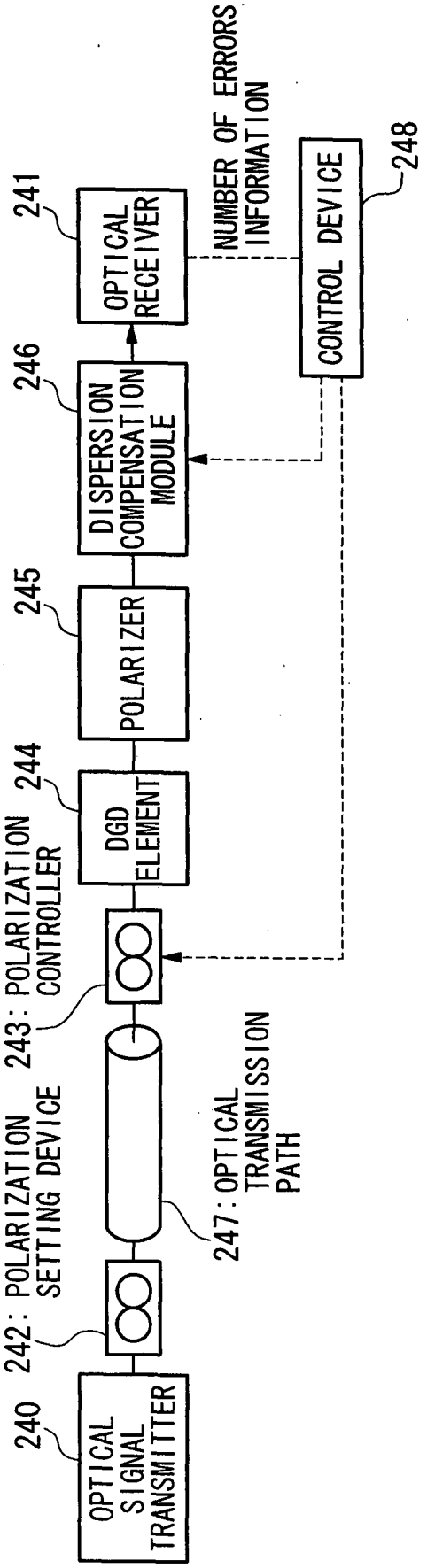

240
OPTICAL SIGNAL TRANSMITTER
242: POLARIZATION SETTING DEVICE
247: OPTICAL TRANSMISSION PATH
243: POLARIZATION CONTROLLER
244
DGD ELEMENT
245
POLARIZER
246
DISPERSION COMPENSATION MODULE
241
OPTICAL RECEIVER
NUMBER OF ERRORS INFORMATION
248
CONTROL DEVICE

FIG. 36

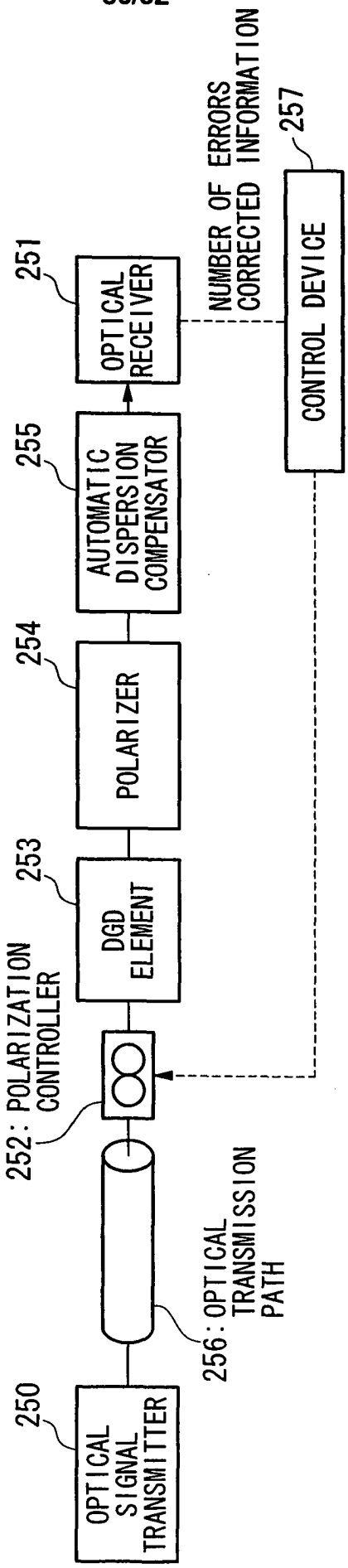

OPTICAL SIGNAL TRANSMITTER
250
256: OPTICAL TRANSMISSION PATH
252: POLARIZATION CONTROLLER
DGD ELEMENT
253
POLARIZER
254
AUTOMATIC DISPERSION COMPENSATOR
255
OPTICAL RECEIVER
251
NUMBER OF ERRORS CORRECTED INFORMATION
CONTROL DEVICE
257

FIG. 37

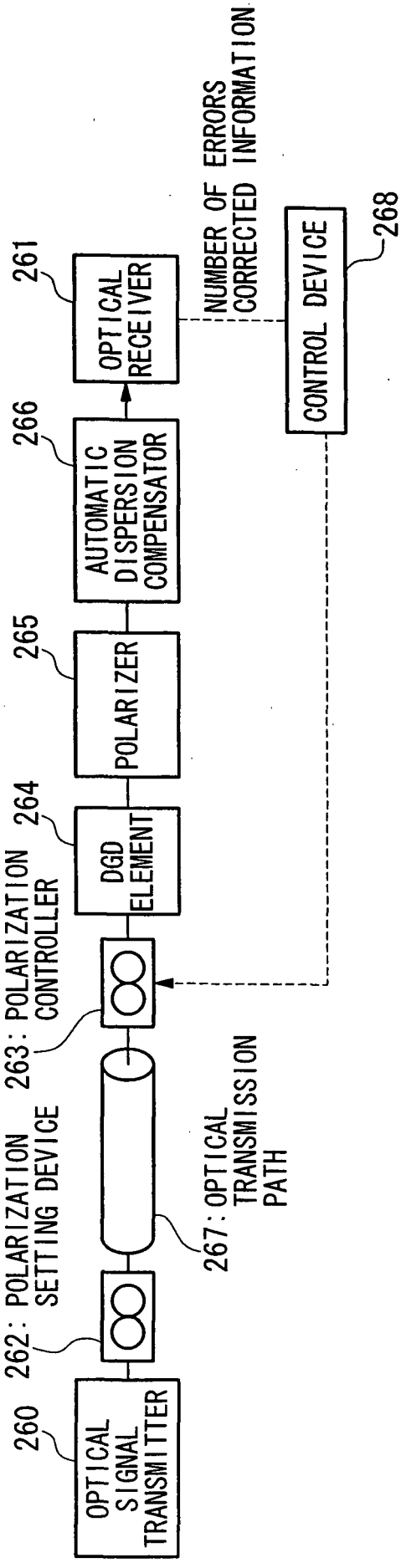

260
OPTICAL SIGNAL TRANSMITTER
262: POLARIZATION SETTING DEVICE
263: POLARIZATION CONTROLLER
264
DGD ELEMENT
265
POLARIZER
266
AUTOMATIC DISPERSION COMPENSATOR
261
OPTICAL RECEIVER
NUMBER OF ERRORS CORRECTED INFORMATION
CONTROL DEVICE
268
267: OPTICAL TRANSMISSION PATH

FIG. 38

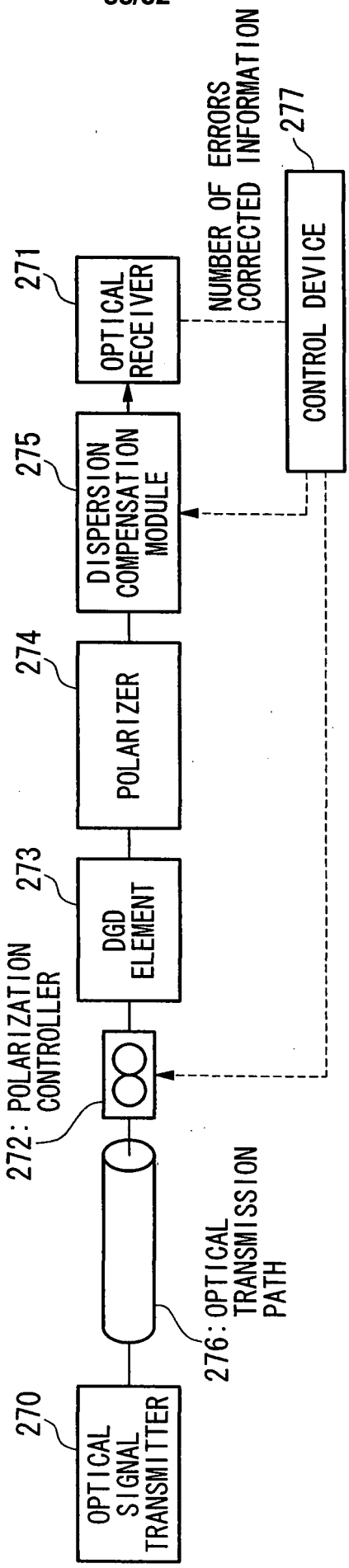

OPTICAL SIGNAL TRANSMITTER
270
276: OPTICAL TRANSMISSION PATH
272: POLARIZATION CONTROLLER
DGD ELEMENT
273
POLARIZER
274
DISPERSION COMPENSATION MODULE
275
OPTICAL RECEIVER
271
NUMBER OF ERRORS CORRECTED INFORMATION
CONTROL DEVICE
277

FIG. 39

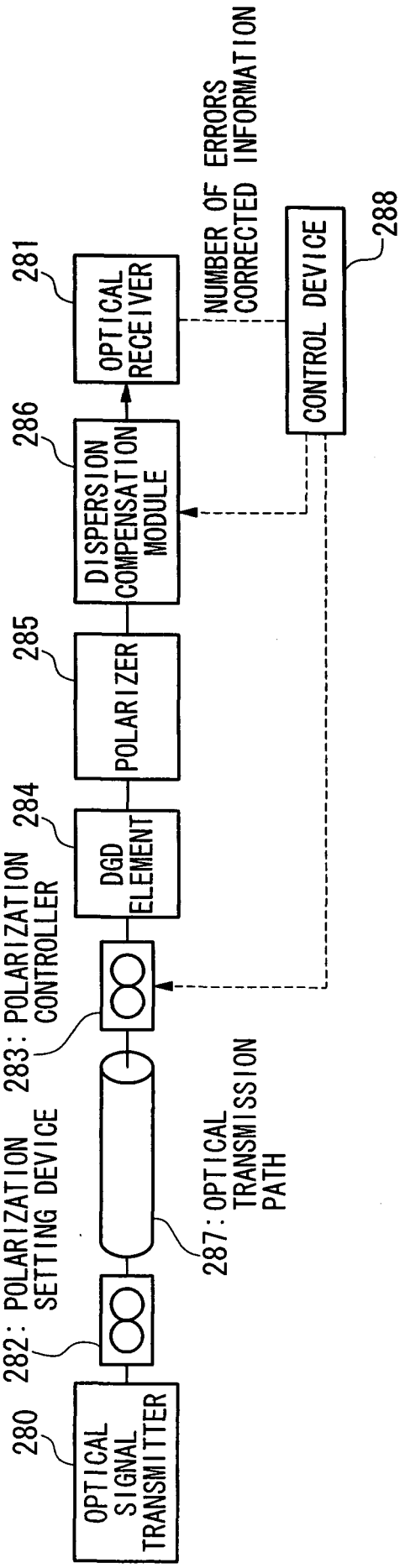

280
OPTICAL SIGNAL TRANSMITTER
282: POLARIZATION SETTING DEVICE
283: POLARIZATION CONTROLLER
284
DGD ELEMENT
285
POLARIZER
286
DISPERSION COMPENSATION MODULE
281
OPTICAL RECEIVER
287: OPTICAL TRANSMISSION PATH
NUMBER OF ERRORS CORRECTED INFORMATION
CONTROL DEVICE
288

FIG. 40

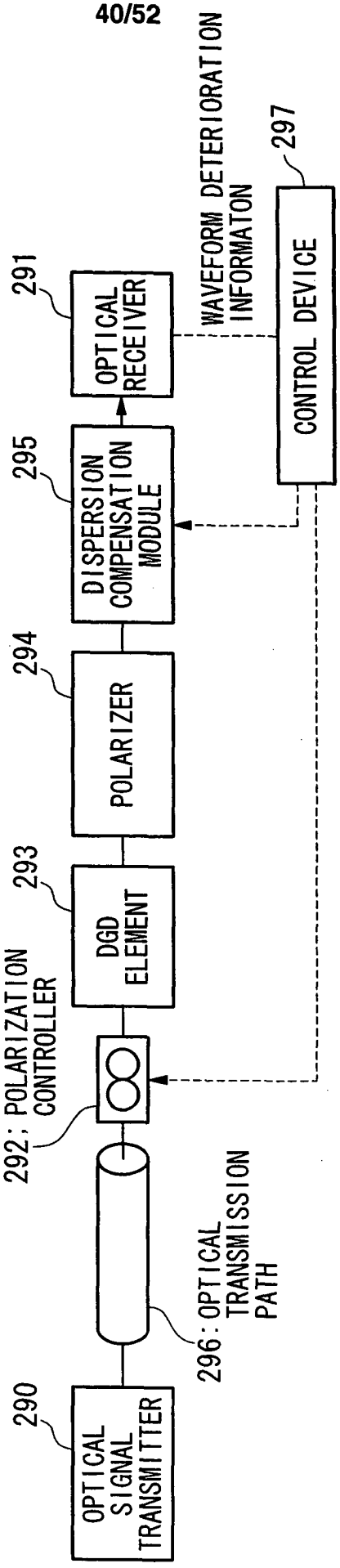
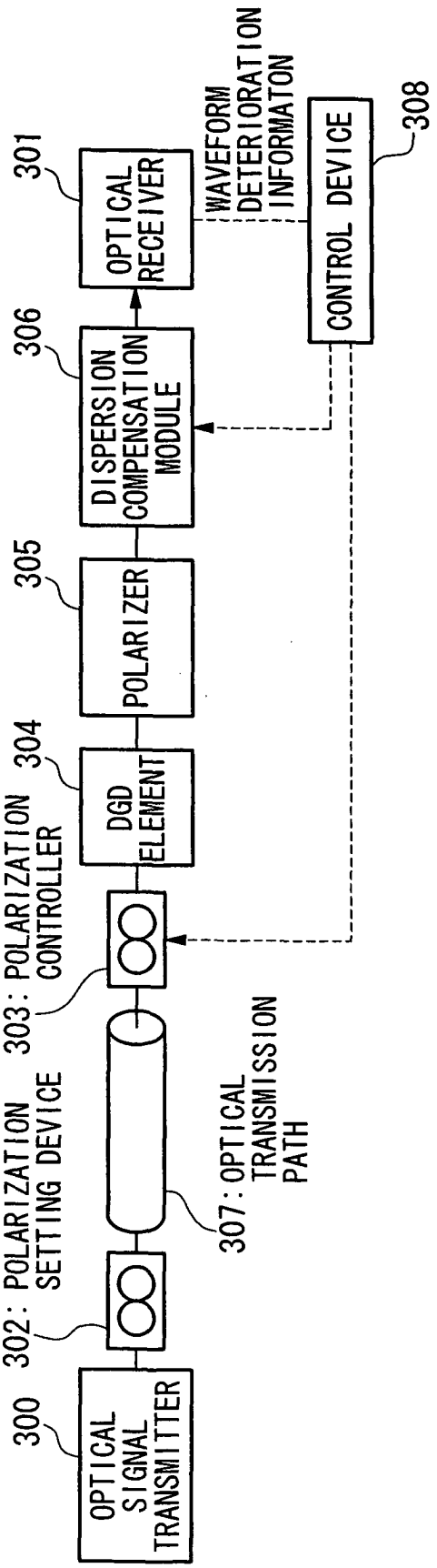

290
OPTICAL SIGNAL TRANSMITTER
296: OPTICAL TRANSMISSION PATH
292; POLARIZATION CONTROLLER
293
DGD ELEMENT
294
POLARIZER
295
DISPERSION COMPENSATION MODULE
291
OPTICAL RECEIVER
WAVEFORM DETERIORATION INFORMATON
297
CONTROL DEVICE

FIG. 41


300
OPTICAL SIGNAL TRANSMITTER
302: POLARIZATION SETTING DEVICE
303: POLARIZATION CONTROLLER
304
DGD ELEMENT
305
POLARIZER
306
DISPERSION COMPENSATION MODULE
301
OPTICAL RECEIVER
WAVEFORM DETERIORATION INFORMATON
308
CONTROL DEVICE
307: OPTICAL TRANSMISSION PATH

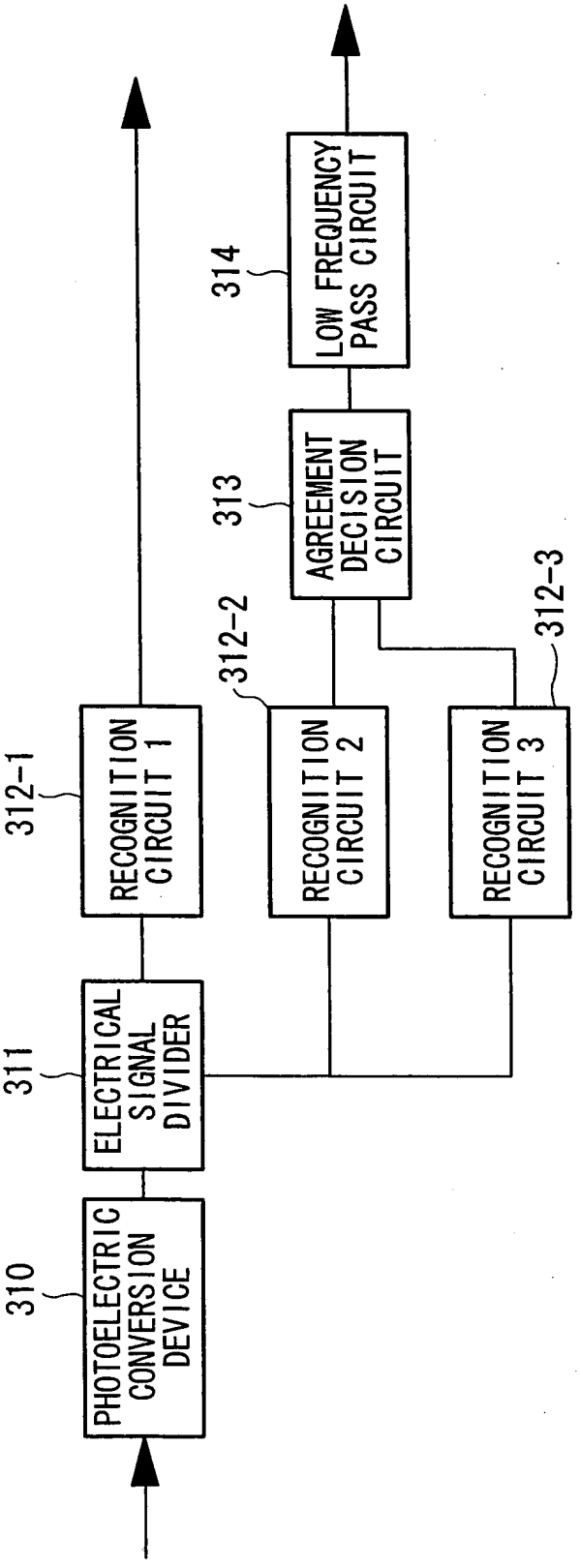

PHOTOELECTRIC CONVERSION DEVICE
310
ELECTRICAL SIGNAL DIVIDER
311
RECOGNITION CIRCUIT 1
312-1
RECOGNITION CIRCUIT 2
312-2
RECOGNITION CIRCUIT 3
312-3
AGREEMENT DECISION CIRCUIT
313
LOW FREQUENCY PASS CIRCUIT
314

FIG. 42

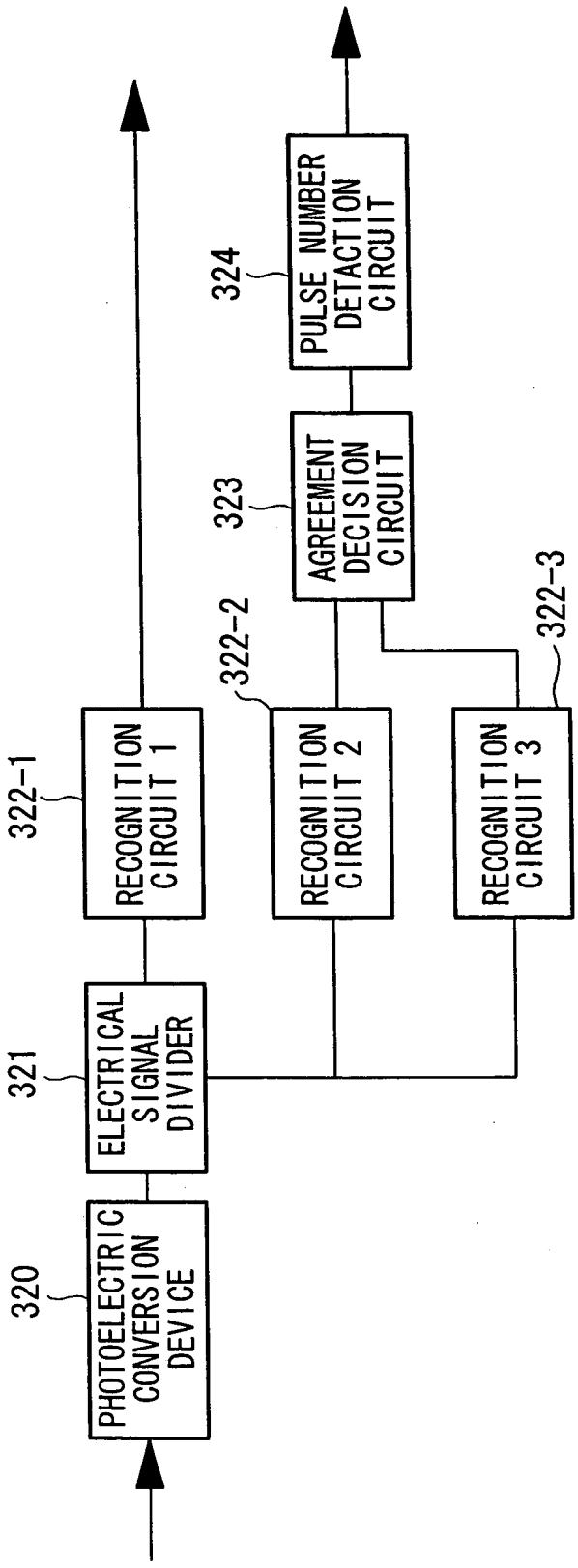
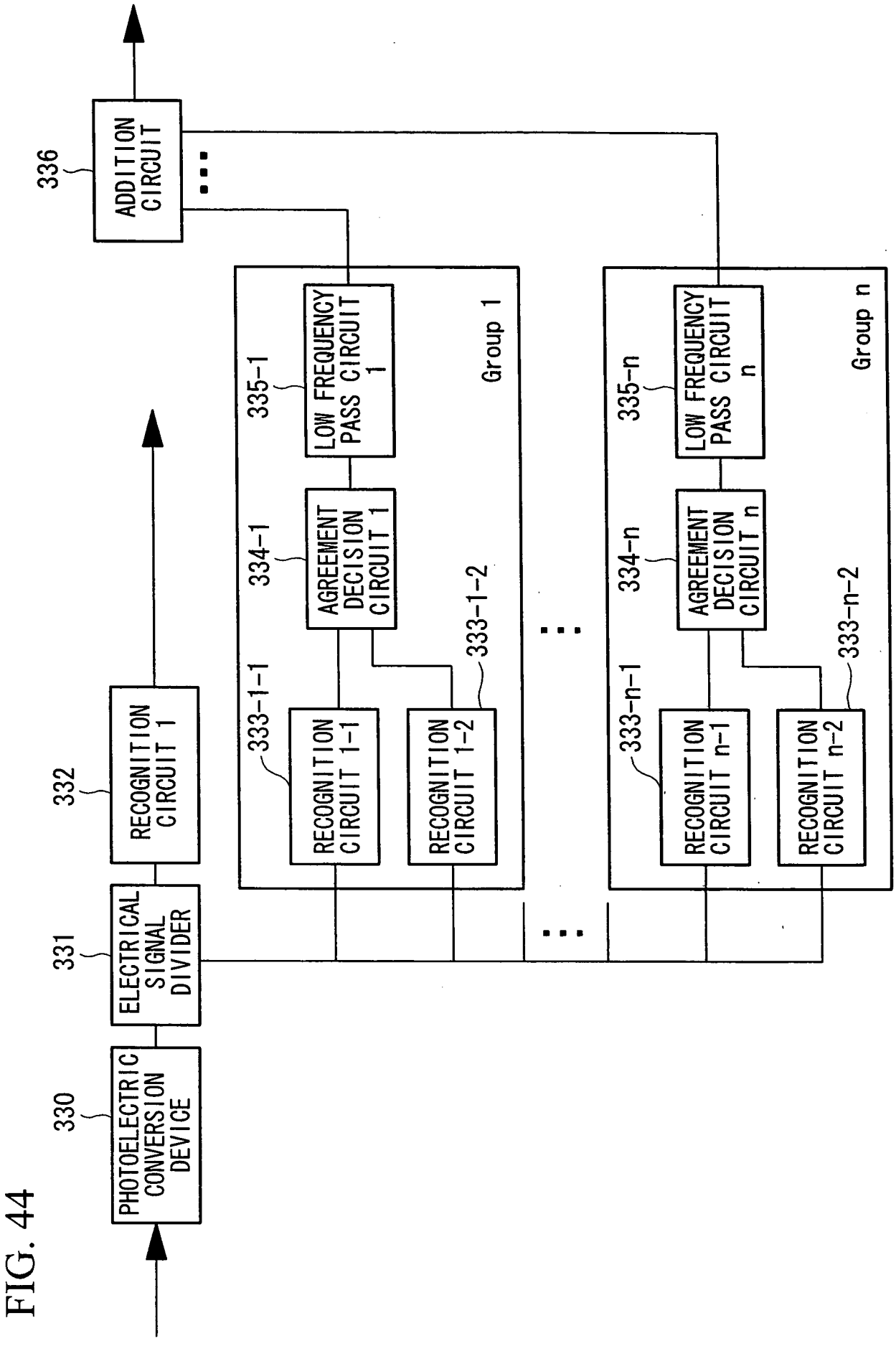

320
PHOTOELECTRIC CONVERSION DEVICE
321
ELECTRICAL SIGNAL DIVIDER
322-1
RECOGNITION CIRCUIT 1
322-2
RECOGNITION CIRCUIT 2
322-3
RECOGNITION CIRCUIT 3
323
AGREEMENT DECISION CIRCUIT
324
PULSE NUMBER DETACTION CIRCUIT

FIG. 43

FIG. 44


PHOTOELECTRIC CONVERSION DEVICE
330
ELECTRICAL SIGNAL DIVIDER
331
RECOGNITION CIRCUIT 1
332
RECOGNITION CIRCUIT 1-1
333-1-1
RECOGNITION CIRCUIT 1-2
333-1-2
AGREEMENT DECISION CIRCUIT 1
334-1
LOW FREQUENCY PASS CIRCUIT 1
335-1
Group 1
RECOGNITION CIRCUIT n-1
333-n-1
RECOGNITION CIRCUIT n-2
333-n-2
AGREEMENT DECISION CIRCUIT n
334-n
LOW FREQUENCY PASS CIRCUIT n
335-n
Group n
ADDITION CIRCUIT
336

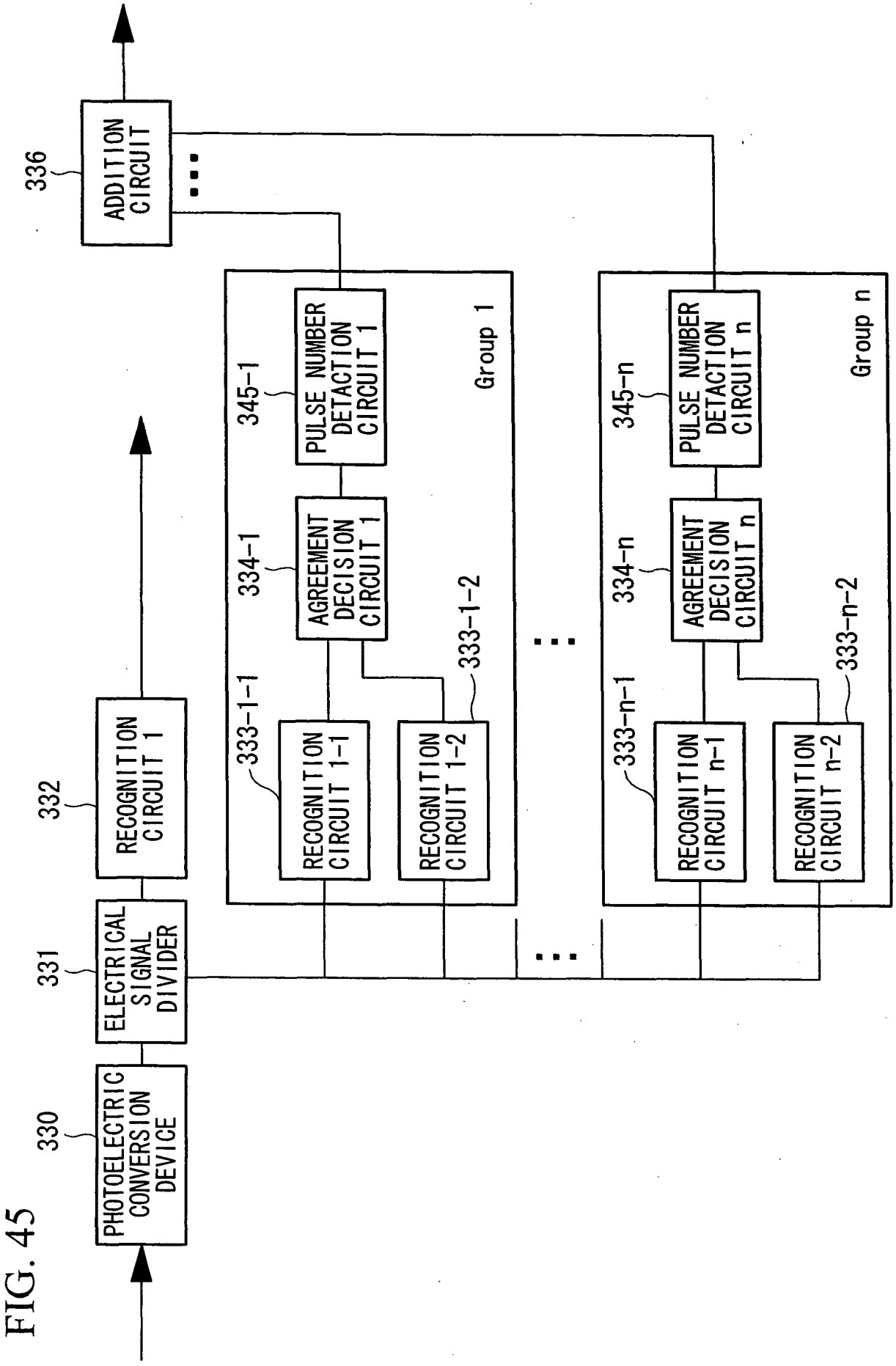

PHOTOELECTRIC CONVERSION DEVICE
330
ELECTRICAL SIGNAL DIVIDER
331
RECOGNITION CIRCUIT 1
332
ADDITION CIRCUIT
336
Group 1
333-1-1
RECOGNITION CIRCUIT 1-1
333-1-2
RECOGNITION CIRCUIT 1-2
334-1
AGREEMENT DECISION CIRCUIT 1
345-1
PULSE NUMBER DETACTION CIRCUIT 1
Group n
333-n-1
RECOGNITION CIRCUIT n-1
333-n-2
RECOGNITION CIRCUIT n-2
334-n
AGREEMENT DECISION CIRCUIT n
345-n
PULSE NUMBER DETACTION CIRCUIT n

FIG. 45

FIG. 46

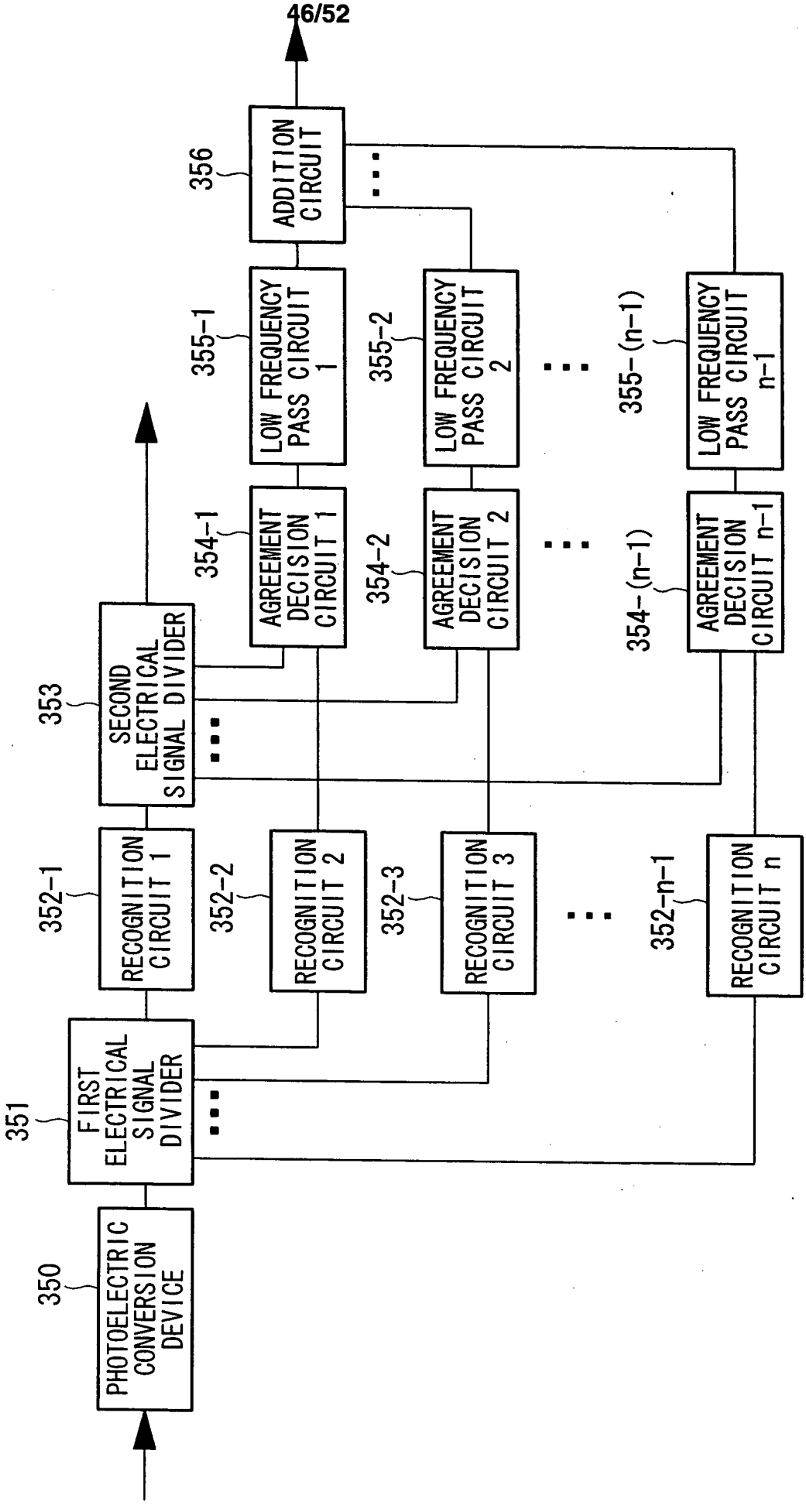

PHOTOELECTRIC CONVERSION DEVICE
350
FIRST ELECTRICAL SIGNAL DIVIDER
351
SECOND ELECTRICAL SIGNAL DIVIDER
353
RECOGNITION CIRCUIT 1
352-1
RECOGNITION CIRCUIT 2
352-2
RECOGNITION CIRCUIT 3
352-3
RECOGNITION CIRCUIT n
352-n-1
AGREEMENT DECISION CIRCUIT 1
354-1
AGREEMENT DECISION CIRCUIT 2
354-2
AGREEMENT DECISION CIRCUIT n-1
354-(n-1)
LOW FREQUENCY PASS CIRCUIT 1
355-1
LOW FREQUENCY PASS CIRCUIT 2
355-2
LOW FREQUENCY PASS CIRCUIT n-1
355-(n-1)
ADDITION CIRCUIT
356

FIG. 47

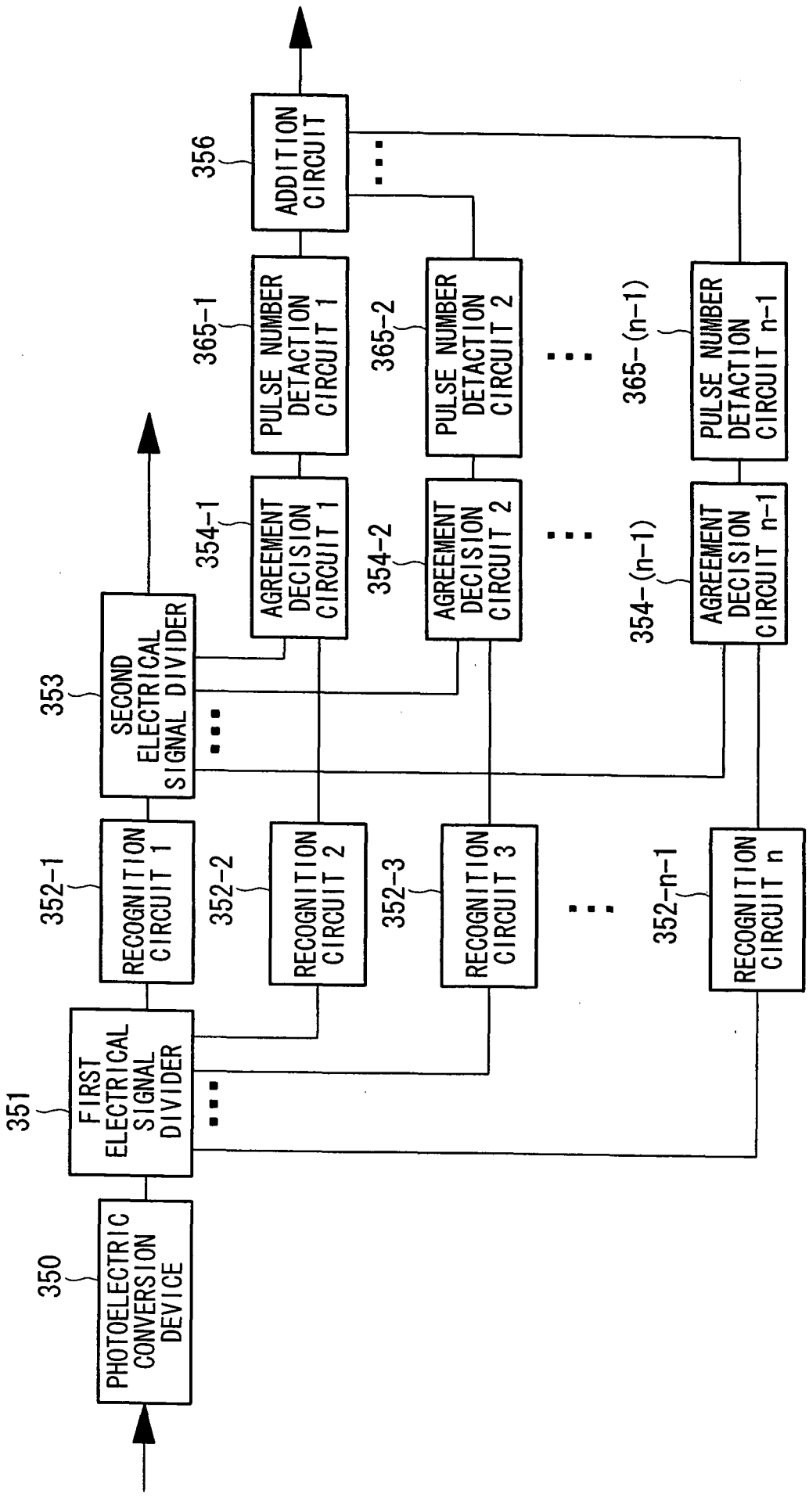

350
PHOTOELECTRIC CONVERSION DEVICE
351
FIRST ELECTRICAL SIGNAL DIVIDER
352-1
RECOGNITION CIRCUIT 1
352-2
RECOGNITION CIRCUIT 2
352-3
RECOGNITION CIRCUIT 3
352-n-1
RECOGNITION CIRCUIT n
353
SECOND ELECTRICAL SIGNAL DIVIDER
354-1
AGREEMENT DECISION CIRCUIT 1
354-2
AGREEMENT DECISION CIRCUIT 2
354-(n-1)
AGREEMENT DECISION CIRCUIT n-1
365-1
PULSE NUMBER DETACTION CIRCUIT 1
365-2
PULSE NUMBER DETACTION CIRCUIT 2
365-(n-1)
PULSE NUMBER DETACTION CIRCUIT n-1
356
ADDITION CIRCUIT

FIG. 48

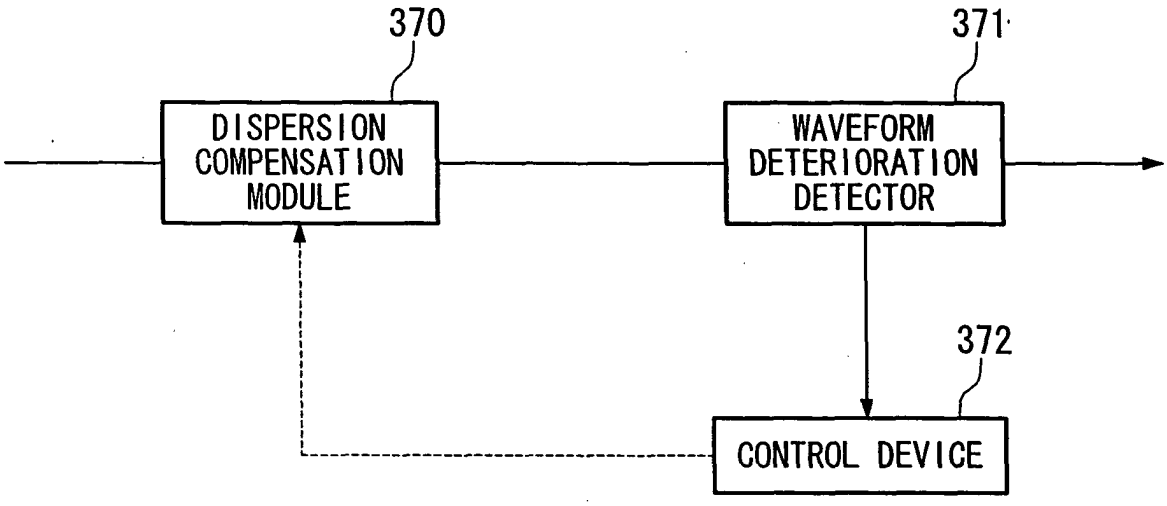

370
371
DISPERSION COMPENSATION MODULE
WAVEFORM DETERIORATION DETECTOR
372
CONTROL DEVICE

FIG. 49

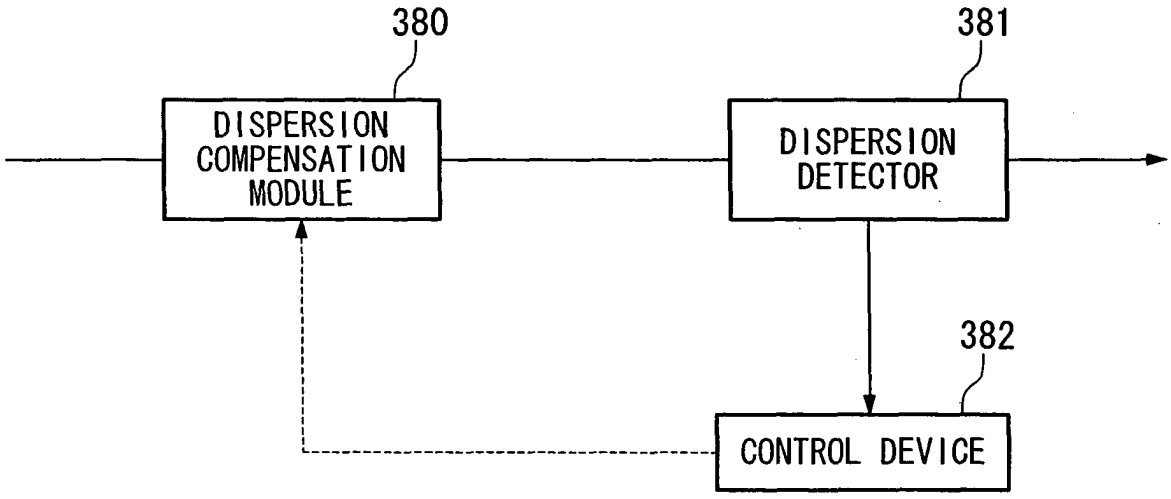

380
381
DISPERSION COMPENSATION MODULE
DISPERSION DETECTOR
382
CONTROL DEVICE

FIG. 50

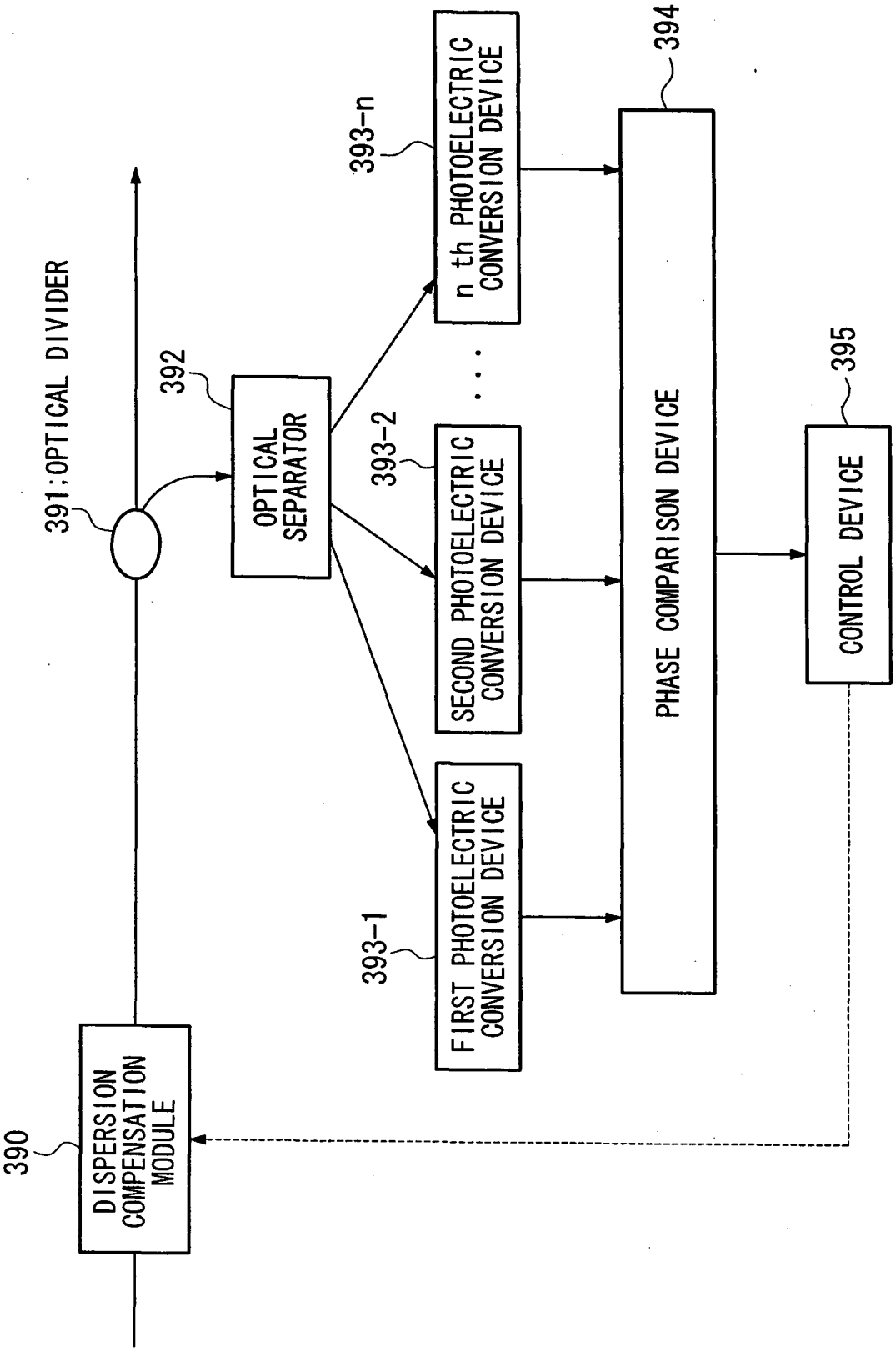

390
DISPERSION COMPENSATION MODULE
391;OPTICAL DIVIDER
392
OPTICAL SEPARATOR
393-1
FIRST PHOTOELECTRIC CONVERSION DEVICE
393-2
SECOND PHOTOELECTRIC CONVERSION DEVICE
393-n
n th PHOTOELECTRIC CONVERSION DEVICE
394
PHASE COMPARISON DEVICE
395
CONTROL DEVICE

FIG. 51

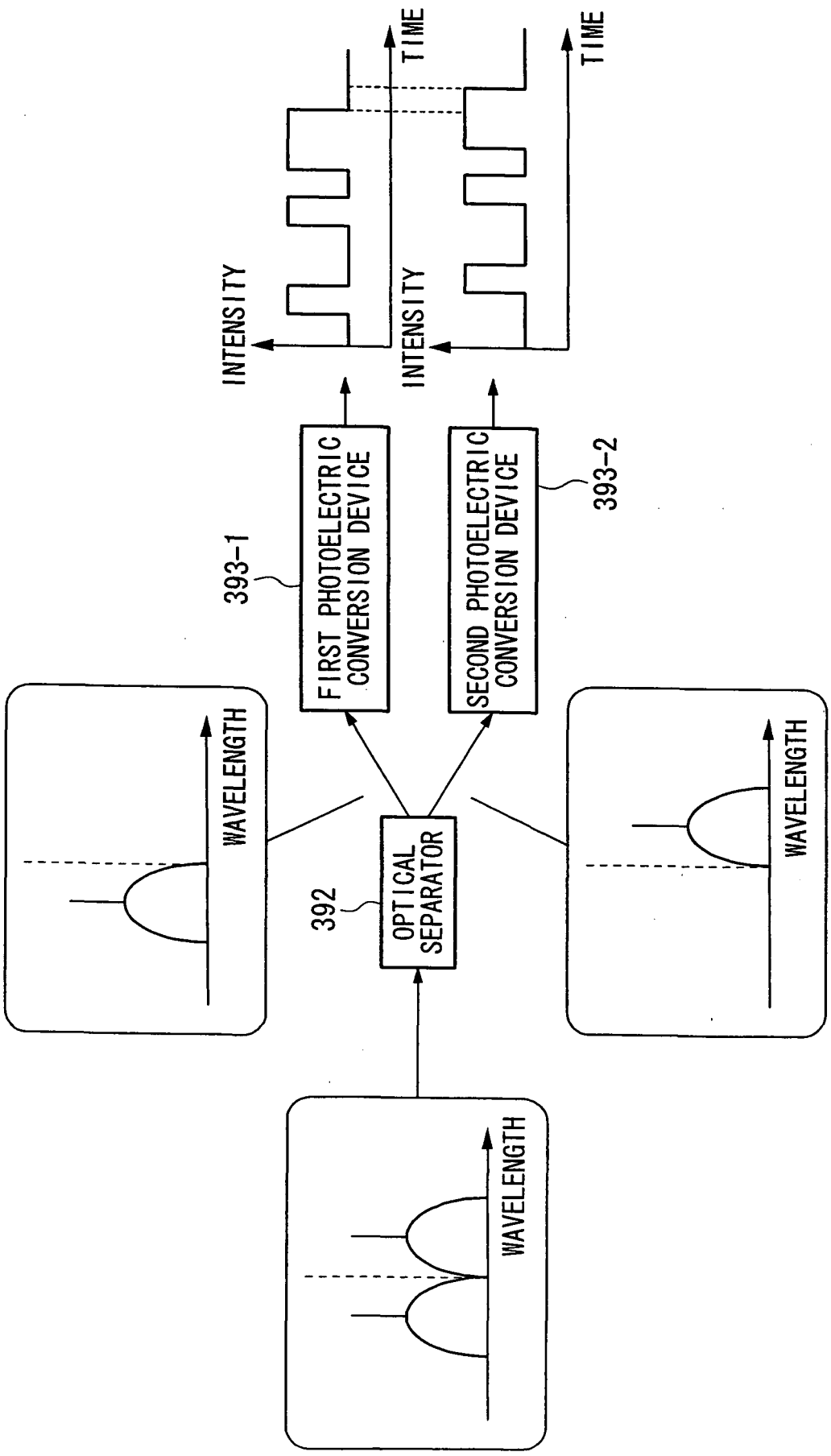

WAVELENGTH
WAVELENGTH
WAVELENGTH
OPTICAL SEPARATOR
392
FIRST PHOTOELECTRIC CONVERSION DEVICE
393-1
SECOND PHOTOELECTRIC CONVERSION DEVICE
393-2
INTENSITY
TIME
INTENSITY
TIME

FIG. 52

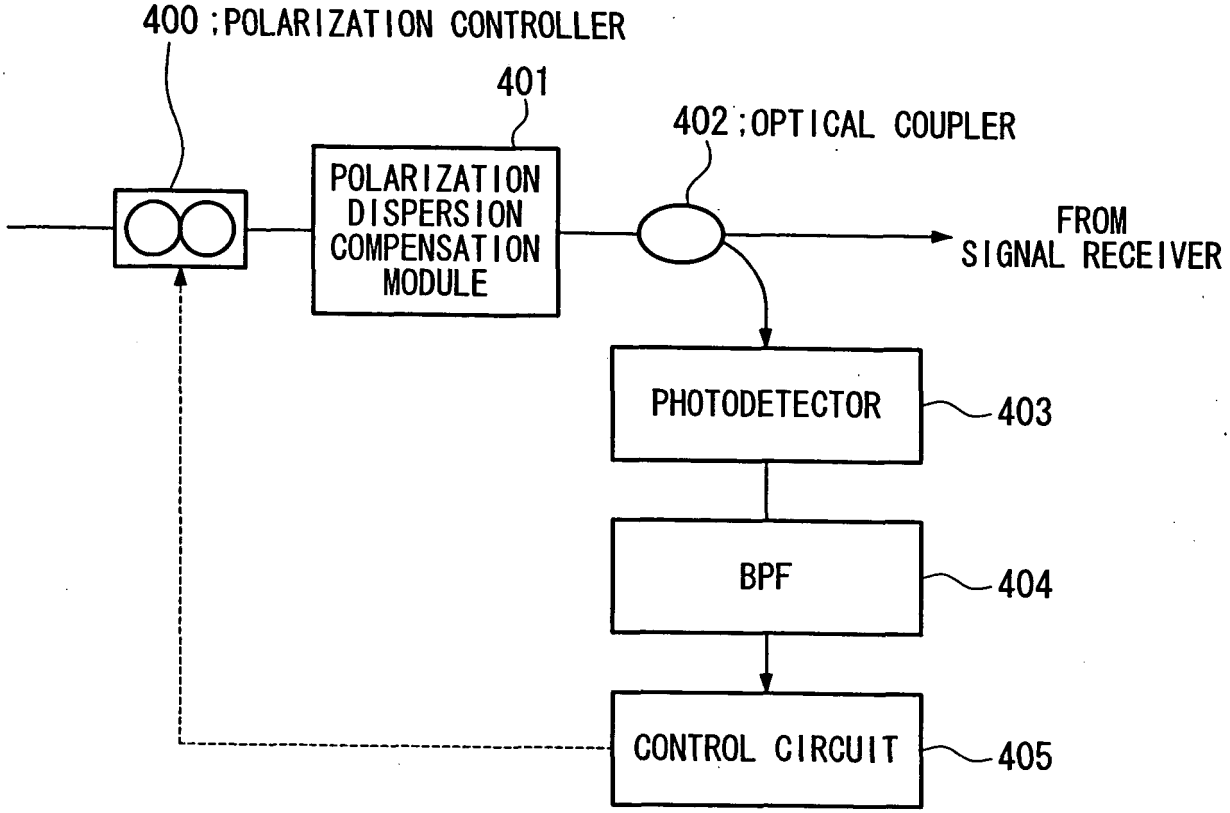

400 ;POLARIZATION CONTROLLER
401
402 ;OPTICAL COUPLER
POLARIZATION DISPERSION COMPENSATION MODULE
FROM SIGNAL RECEIVER
PHOTODETECTOR
403
BPF
404
CONTROL CIRCUIT
405

FIG. 53

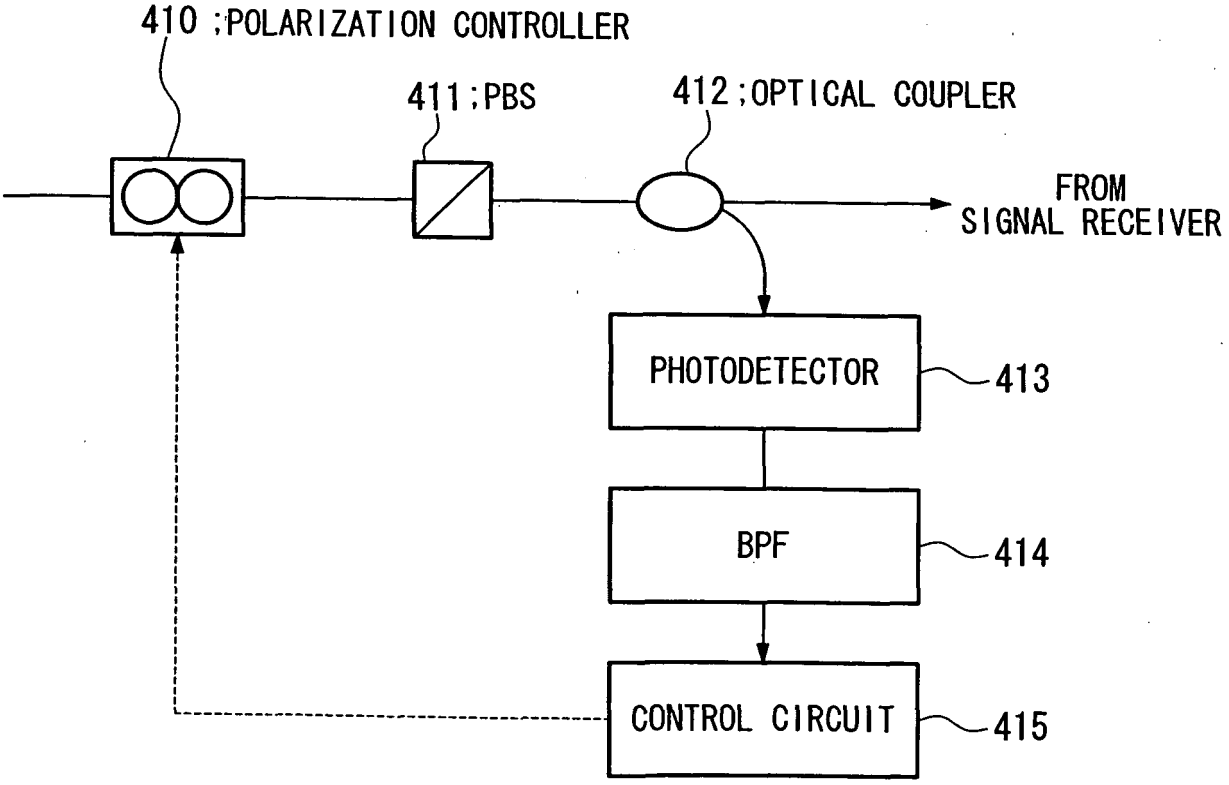
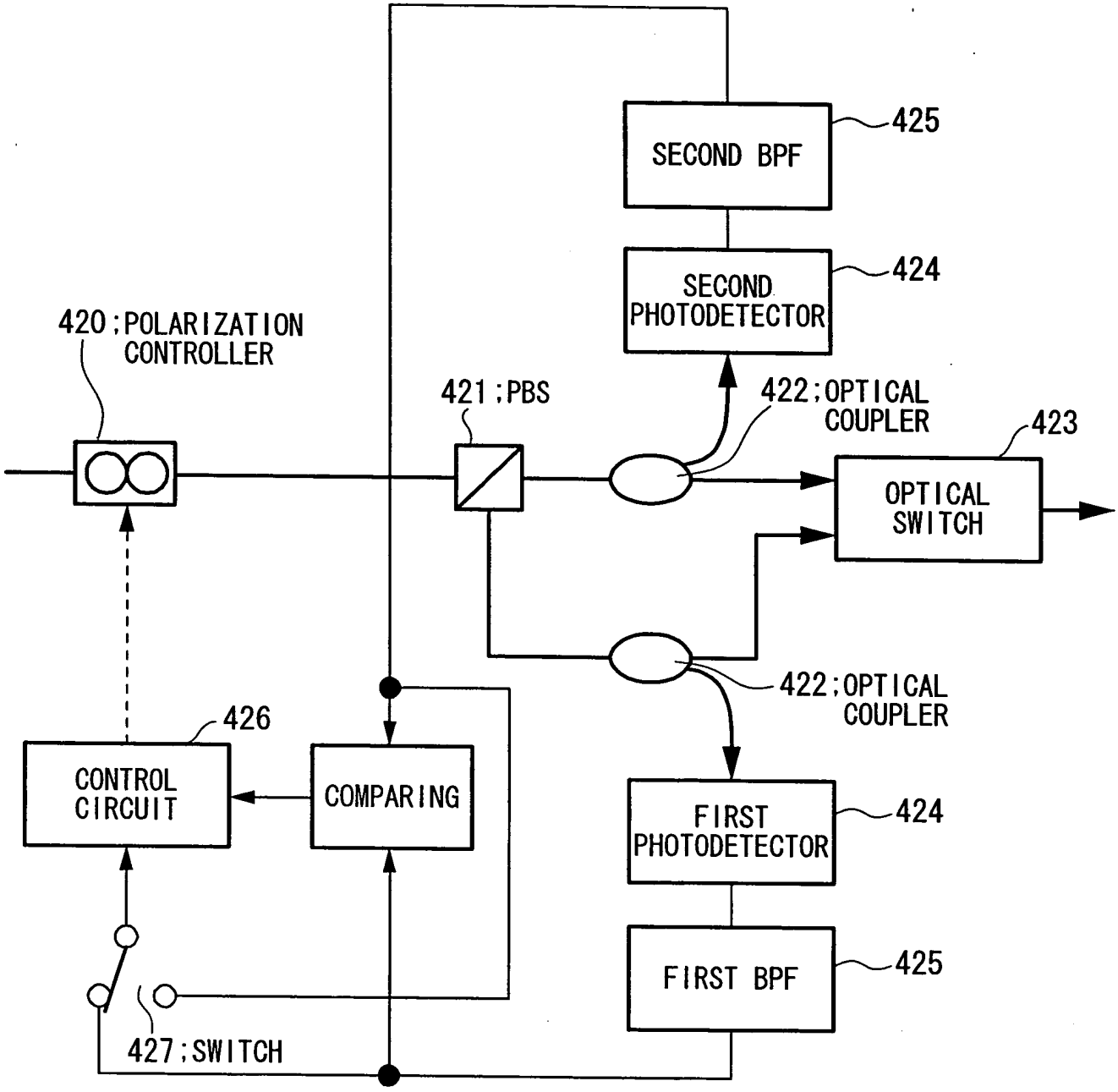

410 ;POLARIZATION CONTROLLER
411 ;PBS
412 ;OPTICAL COUPLER
FROM SIGNAL RECEIVER
PHOTODETECTOR
413
BPF
414
CONTROL CIRCUIT
415

FIG. 54


SECOND BPF
425
SECOND PHOTODETECTOR
424
420 ; POLARIZATION CONTROLLER
421 ; PBS
422 ; OPTICAL COUPLER
423
OPTICAL SWITCH
422 ; OPTICAL COUPLER
426
CONTROL CIRCUIT
COMPARING
FIRST PHOTODETECTOR
424
FIRST BPF
425
427 ; SWITCH